Jerry Dew.

CLERK - TREASURER OFFICE

SPECIFICATIONS

HEADQUARTERS FIRE STATION

COLLEGE AVENUE AT MADISON AVENUE

CITY OF ATHENS

JANUARY 20, 1978

SET NO. _____

ADAMS AND HOMAN, ARCHITECTS
2936 VINEVILLE AVENUE
MACON, GEORGIA 31204

ADDENDUM NO. 1

ADAMS AND HOMAN, ARCHITECTS
2936 VINEVILLE AVENUE
MACON, GEORGIA 31204

FEBRUARY 28, 1978

RE: HEADQUARTERS FIRE STATION
ATHENS, GEORGIA

The attention of bidders is called to the fact that the provisions which have been deleted from the trade sections or elsewhere are possibly being omitted because they already appear in the General Conditions of the Contract, in the Instructions to Bidders, or some other portion of the contract documents. Bidders should read all of the contract documents from which it will readily appear that the omissions set forth in this addendum do not necessarily alter the obligations of the contract, but on the contrary, will result in the avoidance of ambiguity which might be created by the inclusion of repetitious statements.

Specifications and drawings entitled "HEADQUARTERS FIRE STATION, ATHENS, GEORGIA" dated January 20, 1978, are hereby amended under the date of February 28, 1978.

A1-01 SECTION A - ADVERTISEMENT FOR BIDS:

A. Paragraph 1 - Change 3:00 P.M. to 2:00 P.M. and March 7 to March 9.

A1-02 SECTION 2A - EARTHWORK

A. Paragraph 2.A. - Delete the words "sand clay".

A1-03 SECTION 3C - PRECAST CONCRETE PANELS

A. Paragraph 2(10)(a): In last sentence, after the word "bumps" add the words "form marks".

A1-04 SECTION 4B - CLAY MASONRY UNITS

A. Paragraph 2.A. - In last sentence change ninety-five ($95.00) to one hundred ($100.00).

A1-05 SECTION 4C - HOLLOW CONCRETE MASONRY UNITS

A. Paragraph 3.C.(9) - Delete paragraph in its entirety.

A1-06 SECTION 6C - FINISH CARPENTRY, MILLWORK

A. Paragraph 2.B. - Change "1x2" verticals to "1x3".

B. Paragraph 2.E. - Change twenty-four (24.00) to "thirty (30.00)".

ADDENDUM NO. 1

ADAIR AND NORMAN, ARCHITECTS
2936 VINEVILLE AVENUE
MACON, GEORGIA 31204

FEBRUARY 28, 1978

RE: HEADQUARTERS FIRE STATION
ATHENS, GEORGIA

The attention of bidders is called to the fact that the provisions which have been deleted from the trade sections or elsewhere are possibly being omitted because they already appear in the General Conditions of the Contract, in the Instructions to Bidders, or some other portion of the contract documents. Bidders should read all of the contract documents from which it will readily appear that the omissions set forth in this addendum do not necessarily alter the obligations of the contract, but on the contrary, will result in the avoidance of ambiguity which might be created by the inclusion of repetitious statements.

Specifications and drawings entitled "HEADQUARTERS FIRE STATION, ATHENS, GEORGIA" dated January 20, 1978, are hereby amended under the date of February 28, 1978.

A1-01 SECTION A - ADVERTISEMENT FOR BIDS:

A. Paragraph 1 - Change 3:00 P.M. to 2:00 P.M. and March 7 to March 9.

A1-02 SECTION 2A - EARTHWORK

A. Paragraph 2.A. - Delete the words "sand, clay".

A1-03 SECTION 3C - PRECAST CONCRETE PILES

A. Paragraph 2(10)(a): In last sentence, after the word "bumps" add the words "form marks".

A1-04 SECTION 4B - CLAY MASONRY UNITS

A. Paragraph 2.A. - In last sentence change ninety-five ($95.00) to one hundred ($100.00).

A1-05 SECTION 4C - HOLLOW CONCRETE MASONRY UNITS

A. Paragraph 3.C.(9) - Delete paragraph in its entirety.

A1-06 SECTION 6C - FINISH CARPENTRY, MILLWORK

A. Paragraph 2.B. - Change "1x2" verticals to "1x3".

B. Paragraph 2.E. - Change twenty-four ($24.00) to "thirty ($30.00)".

C. Paragraph 3.E. - Delete paragraph in its entirety and substitute the following:

Wood furring (spaces 020, 021, 022, 025) shall be treated 1x4, spaced 16" o.c. horizontally. Secure to concrete block with 1/4" ø toggle bolts spaced 24" o.c. vertically and to concrete wall with power actuated fasteners at 24" o.c. vertically. Provide horizontal furring at base, 4' and at ceiling line. Paneling shall be secured to wood furring with color matched nails, suited for the purpose and drywall adhesive. Adhesive shall be applied to all wood furring.

A1-07 SECTION 6D - CABINETWORK

A. Paragraph 1.D. - In first sentence after the words "wood veneer core" add "(minimum 7 ply)".

B. Paragraph 2.C. - Add as the second sentence:
Hardware shall be installed by cabinet manufacturer.

A1-08 SECTION 7B - SHEET METAL WORK

A. Paragraph 2. - Add as item H.: Metal sleeves and hoods (roof penetrations other than for plumbing vents and openings with wood curbs) shall be copper. See architectural detail for shape.

A1-09 SECTION 8B - HOLLOW METAL DOORS

A. Paragraph 2.b.(2) - Add as second sentence: Inverted channels not acceptable.

A1-10 SECTION 8C - WOOD DOORS

A. Paragraph 3.C. - Change "9F" to "9E".

A1-11 SECTION 8D - METAL WINDOWS

A. Paragraph 2.C. - Add as item (i):
Series P-A3, monumental casement by EFCO Corp.

A1-12 SECTION 8F - FINISH HARDWARE, THRESHOLDS, WEATHERSTRIPPING

A. Paragraph 2.S.: Change "16"x18"" to "18"x20"".

B. Paragraph 3.D. Set 15: Delete hinge numbers and substitute 7630-26.

C. Paragraph 3.D. Set 19: Change "16"x18"" to "18"x20"".

A1-13 SECTION 9B - ACOUSTICAL TILE CEILING

A. Paragraph 2.B.(1)(a): Change DB-28 to DB-24.

B. Paragraph 2.B.(1)(b): Change No. 6349 to No. 6487.

C. Paragraph 2.B.(1)(c): Change ML8000 to ML-6000.

C. Paragraph 3.E. - Delete paragraph in its entirety and substitute the following:

Wood furring (spaces 020, 021, 022, 025) shall be treated 1x4, spaced 16" o.c. horizontally. Secure to concrete block with 1/4" ϕ toggle bolts spaced 24" o.c. vertically and to concrete wall with power actuated fasteners at 24" o.c. vertically. Provide horizontal furring at base, 4' and at ceiling line. Paneling shall be secured to wood furring with color matched nails, suited for the purpose and drywall adhesive. Adhesive shall be applied to all wood furring.

AI-07 SECTION 6D - CABINETWORK

A. Paragraph 1.D. - In first sentence after the words "wood veneer core" add "(minimum 7 ply)".

B. Paragraph 2.C. - Add as the second sentence:
Hardware shall be installed by cabinet manufacturer.

AI-08 SECTION 7B - SHEET METAL WORK

A. Paragraph 2. - Add as item H.: Metal sleeves and boots (roof penetrations other than for plumbing vents and openings with wood curbs) shall be copper. See architectural detail for shape.

AI-09 SECTION 8B - HOLLOW METAL DOORS

A. Paragraph 2.B.(2) - Add as second sentence: Inverted channels not acceptable.

AI-10 SECTION 8C - WOOD DOORS

A. Paragraph 3.C. - Change "9P" to "9E".

AI-11 SECTION 8D - METAL WINDOWS

A. Paragraph 2.C. - Add as item (1):
Series F-A3, nonmemetal casement by ERCO Corp.

AI-12 SECTION 8F - FINISH HARDWARE, THRESHOLDS, WEATHERSTRIPPING

A. Paragraph 2.B.: Change "16"x18"" to "18"x20"".

B. Paragraph 3.D. Set 15: Delete hinge numbers and substitute 7630-26.

C. Paragraph 3.E. Set 19: Change "16"x18"" to "18"x20"".

AI-13 SECTION 9B - ACOUSTICAL TILE CEILING

A. Paragraph 2.B.(1)(a). Change DB-25 to DB-24.

B. Paragraph 2.B.(1)(b): Change No. 6349 to No. 6487.

C. Paragraph 2.B.(1)(c): Change ML8000 to ML-6000.

Addendum No. 1 AI-2

A1-14 SECTION 9E - PAINTING

A. Add as item 15: Wood base and crown mould in spaces 020, 021, 022 and 023 shall be stained and finished to match paneling selected.

A1-15 SECTION 10A - TOILET COMPARTMENTS, TOILET ACCESSORIES

A. Paragraph 2.A.(4) - Add as item (f):
Type H/B, Plastic laminate, with Type F/S base assembly by AAMCO.

A1-16 SECTION 10D - CHALKBOARDS, TACKBOARDS

A. Paragraph 2.A. - Add as item 5: Products by Nelson-Adams Co. are acceptable.

B. Paragraph 2.B. - Add as item 5: Products by Nelson-Adams Co. are acceptable.

C. Paragraph 2.C. - Add as item 6: Products by Nelson-Adams Co. are acceptable.

D. Paragraph 2.D. - Add as item 4: Products by Nelson-Adams Co. are acceptable.

A1-17 SECTION 10F - OVERHEAD DOOR

A. Paragraph 3. - Add as paragraph C.:
Pneumatic safety switch on bottom of door shall be installed and wired to cause instant reversing of the door when contacted.

A1-18 SECTION 10H - MISCELLANEOUS EQUIPMENT

A. Paragraph 2.A.(1): Add "EDER FLAG Manufacturing Co. and Morgan Co." before the words "are acceptable".

B. Paragraph 2.E.: In last sentence, add "Mills Manufacturing Co., Wonderly Letters and Tablets and Metal Arts " before the words "are acceptable".

A1-19 SECTION 10I - GAS PUMPS AND TANKS

A. Add as Section 10I the following:

AI-14 SECTION 9E - PAINTING

A. Add as item "15": Wood base and crown mould in spaces 020, 021, 022 and 023 shall be stained and finished to match specified.

AI-15 SECTION 10A - TOILET COMPARTMENTS, TOILET ACCESSORIES

A. Paragraph 2.A.(4) - Add as item (I):
Type H/S, Plastic laminate, with Type F/S base assembly by ASKCO.

AI-16 SECTION 10D - CHALKBOARDS, TACKBOARDS

A. Paragraph 2.A. - Add as item 5: Products by Nelson-Adams Co. are acceptable.

B. Paragraph 2.B. - Add as item 5: Products by Nelson-Adams Co. are acceptable.

C. Paragraph 2.C. - Add as item 6: Products by Nelson-Adams Co. are acceptable.

D. Paragraph 2.D. - Add as item 4: Products by Nelson-Adams Co. are acceptable.

AI-17 SECTION 10F - OVERHEAD DOOR

A. Paragraph 3. - Add as paragraph C.:
Pneumatic safety switch on bottom of door shall be installed and wired to cause instant reversing of the door when contacted.

AI-18 SECTION 10H - MISCELLANEOUS EQUIPMENT Addendum No. 1 AI-3

A. Paragraph 2.A.(1): Add "EDER FLAG Manufacturing Co. and Morgan Co." before the words "are acceptable".

B. Paragraph 2.E.: In last sentence, add "HALE Manufacturing Co., Modern Letters and Tablets and Metal Arts " before the words "are acceptable".

AI-19 SECTION 10I - GAS FUELS AND TANKS

A. Add as Section 10I the following:

Addendum No. 1 AI-3

Addendum No. 1 AI-3

SECTION 10I

GAS PUMPS AND TANKS

1. GENERAL:

A. Submittal: Furnish 5 copies of catalogue cuts and shop drawings for gas pumps and tanks, indicating dimensions, material gauges and details of installation.

B. Storage: Pump and tanks shall be stored on site to prevent damage.

2. PRODUCTS

A. Pumps shall be standard type having 12-14 gallons per min. capacity, and shall have automatic nozzles, 1 for no-lead gas and 1 for leaded gas. Units shall be decaled "No-Lead", and "Leaded". Both units shall be decaled "No Smoking".

(1) No. 3788 by Bennett
(2) No. 410 by Wayne
(3) No. 785 by Tokheim

B. Tanks shall be 3/16" steel, UL labeled and field coated with 1 application of asphaltic coating. Tanks shall have midwest openings (5-4" holes). Close unused openings. Size shall be 4000 gal. and 1000 gal. See attached drawing ADD-3 for location.

(1) General Steel
(2) Birmingham Tank Co.
(3) Modern Welding

C. Pipes shall be standard weight galvanized with standard fittings.
Suction line - 1-1/2" I.D.
Vent Line - 2" I.D.
Fill Pipe - 4" I.D.
All tank bushings and plugs shall be black cast iron. See attached drawing ADD-4 dated 2/21/78 for layout.

D. Filler caps shall be lockable and watertight, size 4 x 4.
(1) EBW No. 777 filler cap with No. 778 adaptor.
(2) OPW No. 634 filler cap with No. 633 adaptor.

E. Cover plate shall be 12" diameter.
(1) McDonald Mfg. No. 200
(2) Clay and Bailey No. 227 LX
(3) OPW No. 104A

F. Angle check valve - Size 1-1/2".
(1) McDonald Mfg. No. 926
(2) EBW No. 615
(3) OPW No. 14.

G. Screen Vent - Size 2".
   (1) McDonald No. 248
   (2) EBW No. 800
   (3) OPW No. 23

3. EXECUTION:

A. Before tanks are installed, each shall be given a 5 lb. air test and have joints tested with soap suds for leaks. Leaks shall be repaired.

B. Tanks shall be backfilled with minimum 6" layer of dry sand around surface of tanks. Each tank shall be sloped 1" minimum to end with fill pipe.

C. Cover plates shall be installed 1" minimum to 1-1/2" maximum above adjacent concrete surfaces. Slope concrete drive up to plate to form a tapered surface 2 feet in diameter.

D. Tanks shall be buried a minimum of 3 feet below finish grade of concrete.

E. Piping shall be backfilled with minimum 6" layer of dry sand around pipes.

F. Pumps and enclosures shall be secured to concrete slab with bolts in expansion shields.

G. Install pumps, piping and tanks in strict accordance with the manufacturers recommendations and written instructions.

A1-20 DRAWING A-1

A. Site Plan

(1) At catch basin in grass area in southeast corner, add top elevation 713.5 and invert elevation 711.1. Indicate cut mark 4/A1 sim. Depth of catch basin shall be 2'-6". Provide 18" wide, 6" thick, concrete apron on four sides.

(2) Indicate underground gas tanks to be located under 6" concrete drive. See attached drawing no. ADD-3 dated 2/21/78.

(3) See attached drawing ADD-2 dated 2/21/78 for area to be excavated.

(4) Add the following note at the dotted line from southwest corner to curb inlet in parking area:
4" drain from behind concrete wall.

(5) Add the following note on site plan:
Remove all trees within building area and areas to be paved.

(6) Add the following note on site plan: Exterior concrete (drives, sidewalks, etc.) shall have fine broom finish.

(7) At west side of concrete drive entering Hoyt Street - delete indication of curb and gutter from elev. 707 to elev. 711. Extend retaining wall to Hoyt Street curb line. See structural drawings for details of wall.

(8) Add indication of wheelchair curb cuts and ramps on sidewalk on both sides of drive thru between the two sections of west parking lots.

(9) See attached drawing ADD-3, dated 2/21/78, for deletion of east parking area, curb inlets, catch basin in Jackson Street and sidewalk along east side of building. Curb inlet boxes will become junction boxes. See addenda items on drawing no. U-1.

B. Detail 3/A1: Change width of gutter to 24". Delete indication of 6x6 6/6 WWM. Add note that curb and gutter shall be installed by means of steel forms or by use of extruding machine and shall be in accordance with Section 617 of the Ga. State Highway Specifications.

C. Detail 4/A1: Change detail to show 2" distance from invert of pipes (inlets or outlets) to bottom of catch basin.

D. Asphalt specification - Delete in its entirety and substitute the following:

(1) Base course: Apply six (6) inch compacted thickness of crusher run stone over 95% maximum density compacted soil.

(2) Bituminous surface treatment: Over base course apply .25 gallons per square yard with the application of 50 lbs. of No. 6 stone per square yard. Allow treatment to cure 10 days.

(3) Wearing surface: Apply 1-1/2 inch compacted thickness of Type E hot plant mix.

(4) Materials and installation shall be in accordance with Ga. State Highway Specifications.

A1-21 DRAWING A-2

A. Ground level floor plan

(1) Indicate continuous 4" perforated bituminous fiber drain line on fill side of concrete wall. See detail 2/A10. Extend 4" non-perforated drain line from southwest corner of space 025 to curb inlets in parking area. See Drawing A1 for routing of drain line on north side of building.

(2) Add the following note under title:
See drawing S-1 for location of expansion joints with water-stops in concrete retaining wall.

B. Main Level Floor Plan

(1) Delete indication of sidewalk on the east side of spaces 115, 117 and 118. See attached drawing ADD-3 dated 2/21/78 for revised sidewalk layout. See other items in this addendum for revisions to storm drainage structures in this area.

A1-22 DRAWING A-5

A. Roof and fascia panel plan - On west low roof, indicate dryer vent cap on curb (Detail 2/A5) near flue in mechanical room.

A1-23 DRAWING A-6

A. Detail 4/A6: Add note as follows:
See drawing A-2 for extent of handrail.

B. Finish schedule:

(1) In space 016 in base column, delete "P" under "clean column" and substitute "P" under "paint column".

(2) In space 201 in floor column, add 'T' under "trowel column".

(3) In space 202 in floor column, add 'T' under "trowel column".

(4) In space 205 in floor column, add "T" under "trowel column".

(5) In space 201 in Remarks column, add "painted base 8" high".

(6) In space 202 in Remarks column, add "painted base 8" high".

A1-24 DRAWING A-7

A. At jamb detail J-5, delete the numbers "4-1/2" x 1-3/4"".

B. Door and frame schedule:
(1) At doors 2, 16, 25, and 34 in Frame Column under size, change 4-1/2" to 5".

C. Frame Elevations - On elevations "A" and "B", change notation of 1-3/4" jamb and head pieces to 2" and correction affected dimensions. Overall dimensions remain unchanged on frame "A".

A1-25 DRAWING A-8

A. South and West Elevation - Change finish floor elevation "714.8" to "714.87".

A1-26 DRAWING A-10

A. Detail 2/A10 - See attached drawing ADD-1, dated 2/21/78 for revised detail of wood paneling.

A1-27 DRAWING A-14

A. Roof Framing Plan - Add to the note at top - "extend #5 bar from beam bearing into footing."

A1-28 SECTION 15A - PLUMBING

A. Paragraph 15A.07: Add Homestead Fig. 611 and 612 as approved gas cocks. Add Consolidated Valve Industries, Model Apollo as approved ball valve.

B. Paragraph 15A.13 A 1 (b). Change water piping below ground from type 'L' copper to type 'K' copper.

C. Paragraph 15A.13 A 5 - "Storm drain piping shall be Class III reinforced concrete pipe and tongue and groove with mortar joints."

D. Paragraph 15A.13 A 6 - "Building sewer piping shall be vitrified clay, standard length, with precast neoprene collars formed on both the hub and the spigot of the pipe, except that cast-iron soil pipe with hub and spigot shall be installed under parking lots and driveway."

E. Paragraph 15A.13 A 7 - "Contractor shall have option to install No.-Hub cast-iron soil piping in lieu of hub-and-spigot type at all underground locations".

F. Paragraph 15A.14 H - Change wall hydrant from WOODFORD 95 to read ZURN Z-1310, JOSAM 71050 or WADE W-8620.

A1-29 SECTION 15B - HVAC

A. Paragraph 15B.13 H - Add the following manufacturers and model numbers:
"Air Balance, Inc. model 402F or Cesco style SLS."

B. Paragraph 15B.14 B - Add the following manufacturers:
"Metal-Aire or Aremostat"

C. Paragraph 15B.19B - Add the following manufacturers:
"Federal Pacific Electric Co. or Singer."

D. Paragraph 15B.20 A - Add the following manufacturer:
"or Electric Heaters, Inc."

E. Paragraph 15B.24 E - Add the following manufacturers:
"Broan (ceiling fans only) or Ammerman."

F. Paragraph 15B.31 A - Change so much of the sixth line to read:
"... is above 85° and below 50°. This test shall be performed twice, once during the cooling season and once during the heating season".

G. Add a new paragraph as follows:

15B.32 CARBON MONOXIDE EXHAUST SYSTEM

a. Underfloor Ductwork:

1. Underfloor exhaust collection system shall be fabricated using vitrified clay piping. Care shall be taken to ensure the inside of the pipe is free of obstructions. Slope pipe system 1/8" per foot to vertical rise to fan.

2. Each pipe joint shall be properly aligned and filled with oakum. The floor outlet transitions shall fit directly into a 60° spur of the laterals - refer to the detail of the drawings. Pipe sizes shall be as indicated on the drawings.

b. Exhaust Blower: Belt drive, backward inclined type with spun venturi inlets and with shaft tuning in sealed ball bearings. Provide angle iron frame assembly for fan and motor, accessory wall bracket, rubber-in-shear vibration isolators and belt guard. Fan shall be arranged for horizontal discharge and the entire assembly shall be painted. Utility blower sets shall be as manufactured by the Brundage Company and Ammerman Co.

1. General: Furnish and install the numbers and types of underfloor exhaust floor outlets indicated on the drawings and generally as shown on the detail on the drawings.

2. Construction: Each floor outlet shall consist of a heavy cast aluminum frame with hinged lid(s) and a

transition of heavy gauge galvanized steel coated with rust preventative bituminous paint, with a cast aluminum hose seal and centering device at the base end of the transition. Lids shall be hinged to the castings with stainless steel pins and shall have heavy duty reinforcement bars underneath. Each casting shall have bevelled edges.

3. Hoses: Each floor outlet shall be complete with single or dual hose assemblies (refer to the drawings) constructed from flexible galvanized steel hose piping. Each hose shall be 4" diameter and minimum 9' long. One end of each hose assembly shall have a 20 ga. galvanized steel tail pipe adapter complete with gas analyzer slot and chain and hook assembly. The other end shall have a wire cage hose guide.

4. Manufacturers: The outlets shall be as manufactured by Engwald Corp. Models U-50-DH (single), products by Car-Mon Products, Inc. and Ammerman Co. are acceptable.

A1-30 SECTION 16 - ELECTRICAL

A. Add Paragraph 16.23 E as follows: "Provide special ganged device plates for door opener push button stations (two 8-station and three 2-station cover plates required). Plates shall be engraved with their respective door numbers. If the push buttons are not etched RAISE, LOWER and STOP, the plates shall be engraved with these functions adjacent to the respective push button. Cover plates shall be satin stainless steel. Provide complete submittal data on push buttons and on companion device plates."

B. Add Paragraph 16.34 as follows: DOOR SECURITY SYSTEM
   a. Provide and install door security system to control access through doors 2 and 5 into Space 015. System shall consist of pushbutton/speaker and doorlock release units at each door, a control unit in Space 015 and all associated amplifiers, transformers and wiring. Doorlock release mechanism shall be provided by hardware supplier and wired by the electrical contractor.
   b. Equipment:
      1. Control unit (located in Space 015). Recessed in wall with On/Off control, speaker, talk-listen and doorlock release push buttons. Unit shall be two-entry type with separate doorlock release buttons for each door.

      2. Door Units. Recess wall mounted with push button and speaker. Unit at door 2 shall have weatherproof enclosure.

      3. Amplifier (located above ceiling in space 015) Two-entry type with automatic call transfer circuitry.

      4. Transformer. Low voltage type, 120 VAC primary, 24 VAC secondary.

      5. Conductors. 22 ga., run exposed above ceiling, except where they shall be installed in conduit from wall boxes to space above ceiling.

6. Equipment supplied by others. Doorlock release assemblies shall be supplied by hardware supplier. Verify operating voltage prior to ordering equipment.

7. Manufacturer: NUTONE Direct-A-Com Series 1 or equal by AUDIO ENGINEERING, Macon, Georgia.

C. System Operation. Person desiring to gain passage through door 2 or 5 can press the pushbutton which activates a buzzer in the control unit in space 015. After identity has been established through use of the two-way intercom, the operator in space 015 can activate the doorlock release, allowing the door to be opened.

A-31 DRAWING P-1

A. Add one wall hydrant outside space 123. Drop piping in wall between spaces 123 and 124. Mount approximately 18" above grade.

B. Add one wall hydrant outside space 022. Install piping in wall between spaces 022 and 024. Mount approximately 18" above grade.

C. Relocate Fire Department valve from north side of door opening (near space 112) around the corner to the east wall approximately 16" from the corner. Valve shall be 1-1/2" UL listed ALLENCO No. 170-U with cast brass body, red enamel wheel handle and City of Athens Fire Department threads. Equal valves by ELKHART, SECO or STANDARD.

D. Add note by gas meter location. "Provide 4" concrete pad for gas meter. Pad shall be sized to support meter provided".

E. Show oil inteceptor located north of Vehicle Shop in 3" waste line from floor drain FDC. Interceptor shall be JOSAM GX-30 or equal by SMITH WADE or ZURN. Install interceptor in six-foot deep, 36" by 48" outside dimension pit with 6" reinforced concrete walls. Top of pit walls shall be chamferred and shall be 2" above grade. Provide 1/4" steel cover with two handles. Provide 55 gallon underground storage drum connected by 2" pipe to gravity draw-off assembly. Provide 2" suction line from storage drum to suction fitting mounted flush in 18" by 18" by 6" concrete pad; chamfer top of pad and install 2" above grade. Provide two 2" vents from interceptor and one 2" vent from storage drum up in vehicle shop wall to above roof. Terminate with JOSAM 26700 series vent caps; with one vent from interceptor and vent from storage drum 12" above roof and other vent from interceptor terminated 24" above roof. Provide 1/2 cubic yard of course gravel around interceptor to facilitate drainage.

A1-32 DRAWING M-1

A. Vehicle Shop Plan - Add wall heater CH-3 (same capacity as CH-2) on west wall of the bathroom, Room No. 203.

B. Ground Floor Air Conditioning Plan.

Provide a new ceiling type exhaust fan in the ceiling of photo-lab, space 002. Duct the 10 x 3-1/4 discharge to a Carnes type EX-41 wall cap on the west wall of the building. Switch the fan from a wall mounted fan switch, adjacent to the light switch. Fan to be as follows:

EF-10: Carnes model EC-17; 100 CFM; 0.15" SP; 1470 RPM: 1/70 HP.

Provide a door grille in the door to this room. Grille to be as follows:

'T': Carnes model 910; Prime coat finish; size 12 x 12; Core only.

C. Indicate a 4" dryer vent from the dryer in space 104, rise up in the chase behind the dryer and terminate above the roof with a curb-mounted dryer vent cap. See Architectural Detail 2/A-5.

A1-33 DRAWING M-2

A. Exhaust fan schedule - At EF-6, change GRBA-19R5 to URBA-20R4, 880 to 770 and 4400 to 4200.

B. At note 10 delete the words "Provide 40" high curb".

A1-34 DETAIL DRAWINGS

A. Underfloor Exhaust Duct Detail, Drawing ADD-5, dated 2/21/78 Section at EF-9, Drawing ADD-6 dated 2/21/78.

A1-35 DRAWING E-1

A. Space 105 - Connect center 'c' fixture to emergency circuit, E-2. Provide keyed switch adjacent to 3-way switch at door 9.

B. Space 119 - Connect center 'c' fixture to emergency circuit E-2. Provide keyed switch adjacent to 3-way switch at door 18.

C. Space 118 - Connect center 'c' fixture of bottom row to emergenc circuit E-2. Provide keyed switch adjacent to 3-way switch at door 26.

A1-36 DRAWING E-2

A. Space 109 - Show two receptacles by lavatories to be on new separate circuit to Panel A. Connect to 20A1P spare circuit breaker; circuit breaker shall have ground fault circuit interruptor.

B. Vehicle shop, space 201. Show 3-position push button station at overhead door. Show 30-amp non-fused disconnect, motor controller, and motor (to be furnished by door sub-contractor). Show conduit connecting push-button station and motor controller, show circuit D-19 from disconnect to Panel D.

C. Note concerning DOOR OPENER. Delete last sentence as written and add the following: "All conduit shall be provided and installed by electrical contractor. Disconnect switches, starters, contractors, motors and conductors shall be provided and installed by door sub-contractor".

D. Add following note to Communications/Signal Conduit Riser: "Provide and install pullwire in all conduits."

E. Show 400A fused disconnect located adjacent to Panel MDP. Provide plywood backboard.

F. Show Panel B located centered on wall between openings.

G. Add the following note to 110 gallon underground fuel tank filler box and vent: "Filler box with lock recessed in 18" x 18" x 6" concrete pad, slope to shed water; provide one cu. ft. of crushed rock below pad for drainage purposes. Provide removable cover plate flush with top of pad. Box assembly shall be 4" OPW 122 with drain hole; provide lock. Run 2" galvanized steel vent piping up in wall, offset above ceiling and penetrate roof approximately 24" from outside wall. Terminate 24" above roof with gooseneck fitting. See Architectural detail for flashing."

A1-37 DRAWING E-3

A. Elevation Detail of Space 125. Show junction box which is located at 42" above floor and down from note 'j', to be 4" x 4". Other boxes shall be single gang junction boxes.

B. Power Riser. Show incoming power conductors to go through 400A fused disconnect switch with 400A current-limiting fuses and then to Panel MDP.

C. Panel Board Schedule. Show Panel MDP to be 400AMLO instead of 400A M.B.

A1-38 DRAWING U-1

A. Anchor Base Detail. Show that dimensions which apply to Fixture "P" also apply to Fixtures "Q" and "R".

B. Change lighting fixture designations such that fixtures now marked "Q" are marked "R" and that fixture now marked "R" is marked "Q". There should be one "Q" fixture near vehicle shop and two "R" fixtures on the ends of the parking area east of the fire station.

C. Blind junction box on north side of building, approximately 45' east of MH-2. Change invert from 698.0 to read 696.0. Change note from "even slope of 17% between J.B.S." to read "even slope of approximately 21% between J.B.S."

D. Manhole Detail. Add note: "Contractor shall have option of providing and installing pre-cast concrete units of equal or greater volume and strength."

E. Show the size of the storm drain piping connecting CB-1 and CB-2 to be 8". Show size of storm drain piping from CB-1 to blind junction box to be 12".

F. Manhole Details. Change manufacturer's number of TOP from NEENAH No. R-3070 to NEENAH No. 3293 (R-3179).

G. Delete CB-4.

H. MH-7; Change to blind junction box, change invert from 710.0 to 709.0.

I. MH-6; Change top elevation from 713.7 to even with grade; change invert from 709.0 to 708.0, change top from NEENAH R-3070 to City of Athens Standard Cast-Iron Manhole and Ring. Lid shall be 25-1/8" round, as manufactured by Higgins, Atlanta, Georgia, or Russell Foundry, Anderson, Alabama. Total weight of ring and cover shall be 338 lbs.

J. Blind junction box north of building, which receives water from CB-1. Change invert from 706.0 to 705.0.

A1-39 DRAWING A-2

A. Indicate fire extinguishers in space 001, 016, 104, 114.

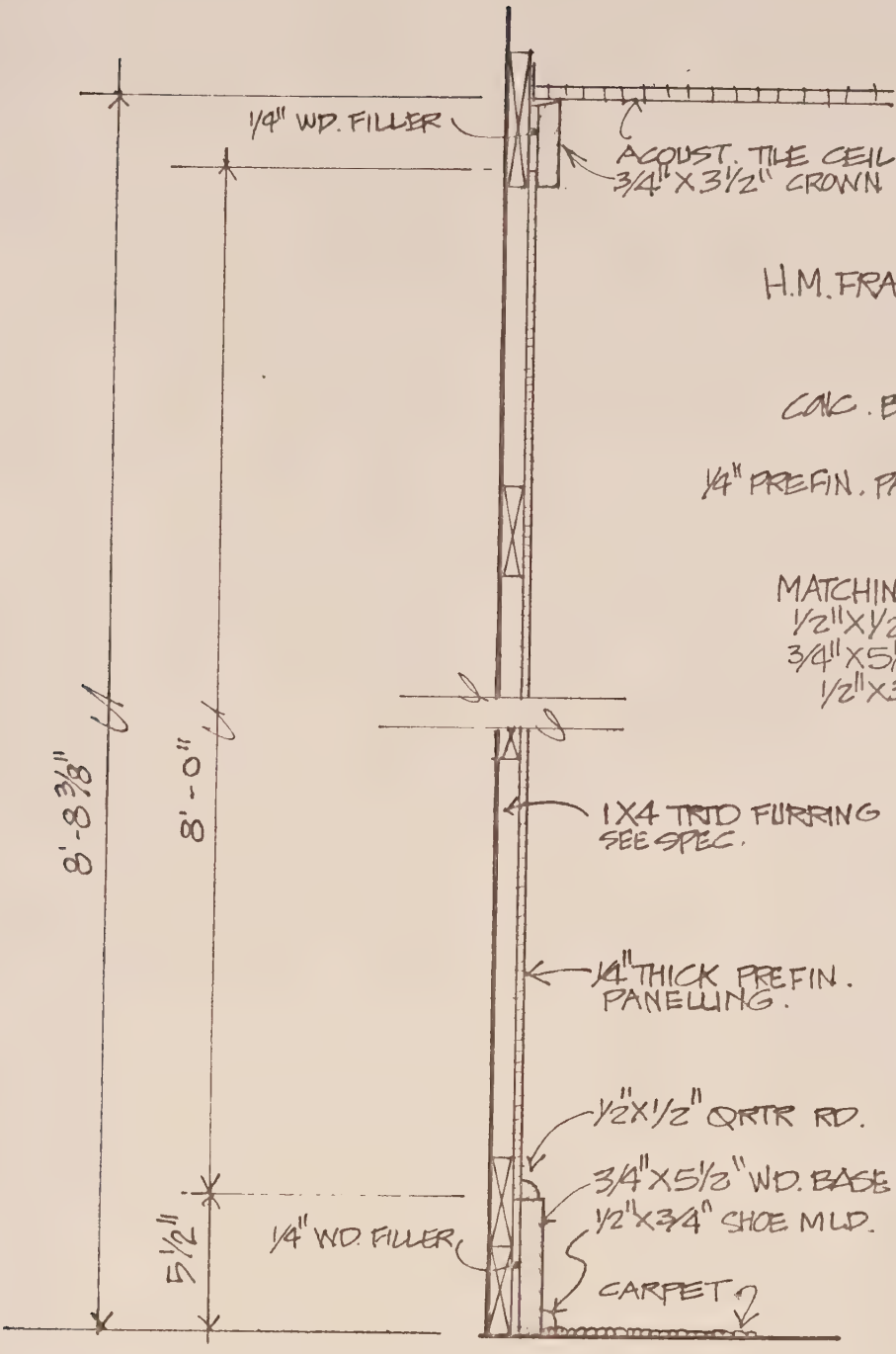
A1-40 DRAWING E-2

A. On west wall of space 203, indicate cabinet heater no. 3 with circuit to D-19.

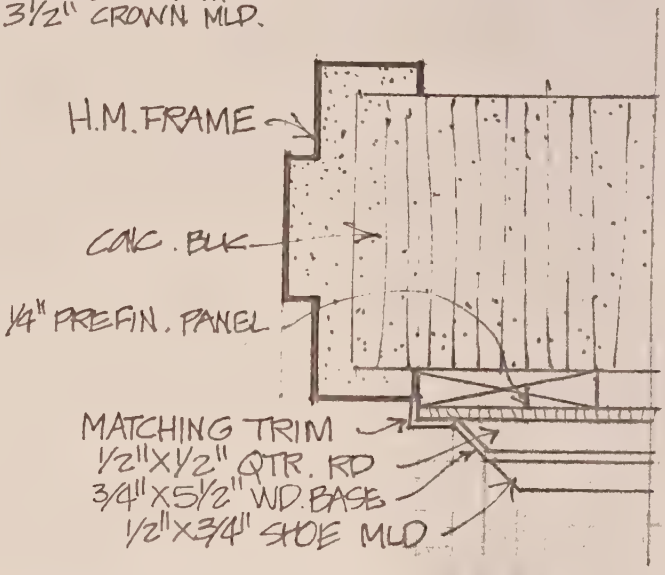
A1-41 DRAWING E-3

A. Panel Board Schedule - At Panel D, indicate circuit no. 19 to be 20 amp 2 pole, 2KVA with no. 12 conductors in 1/2" conduit. Circuits 20 through 22 shall be spares as indicated.

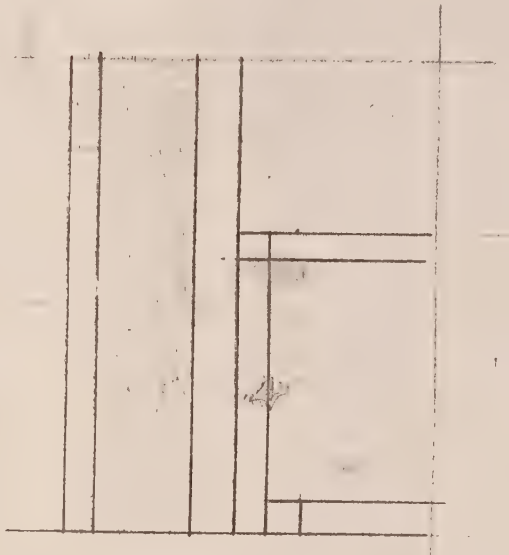
END OF ADDENDUM NO. 1



DET. AT PREFIN. PANELLING
SCALE 1 1/2" = 1'-0"



JAMB. DET.



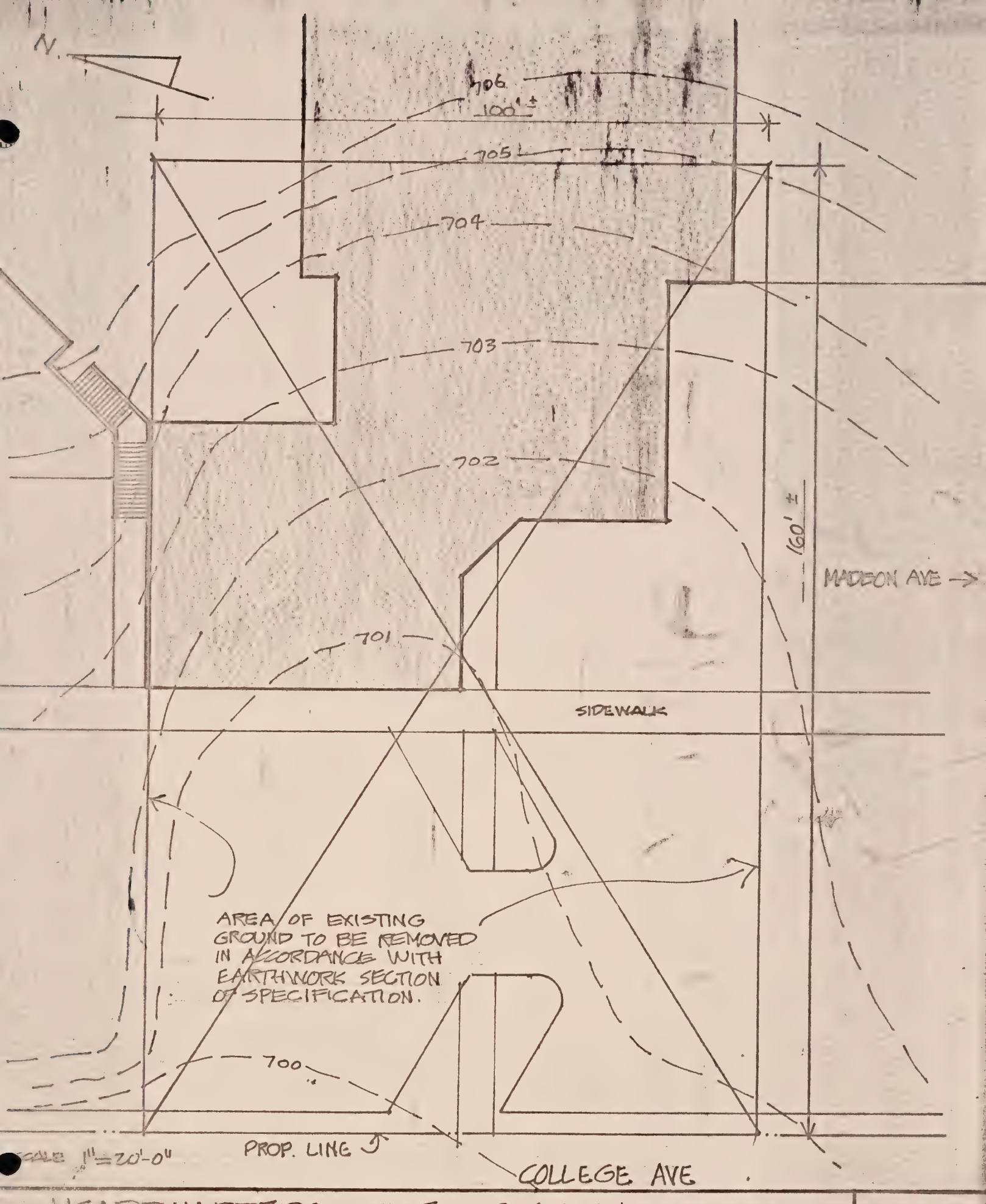
JAMB. ELEV.
SCALE 3" = 1'-0"

HEADQUARTERS FIRE STATION
CITY OF ATHENS

ADAMS AND HOMAN, ARCHITECTS

2·21·78

ADD·1

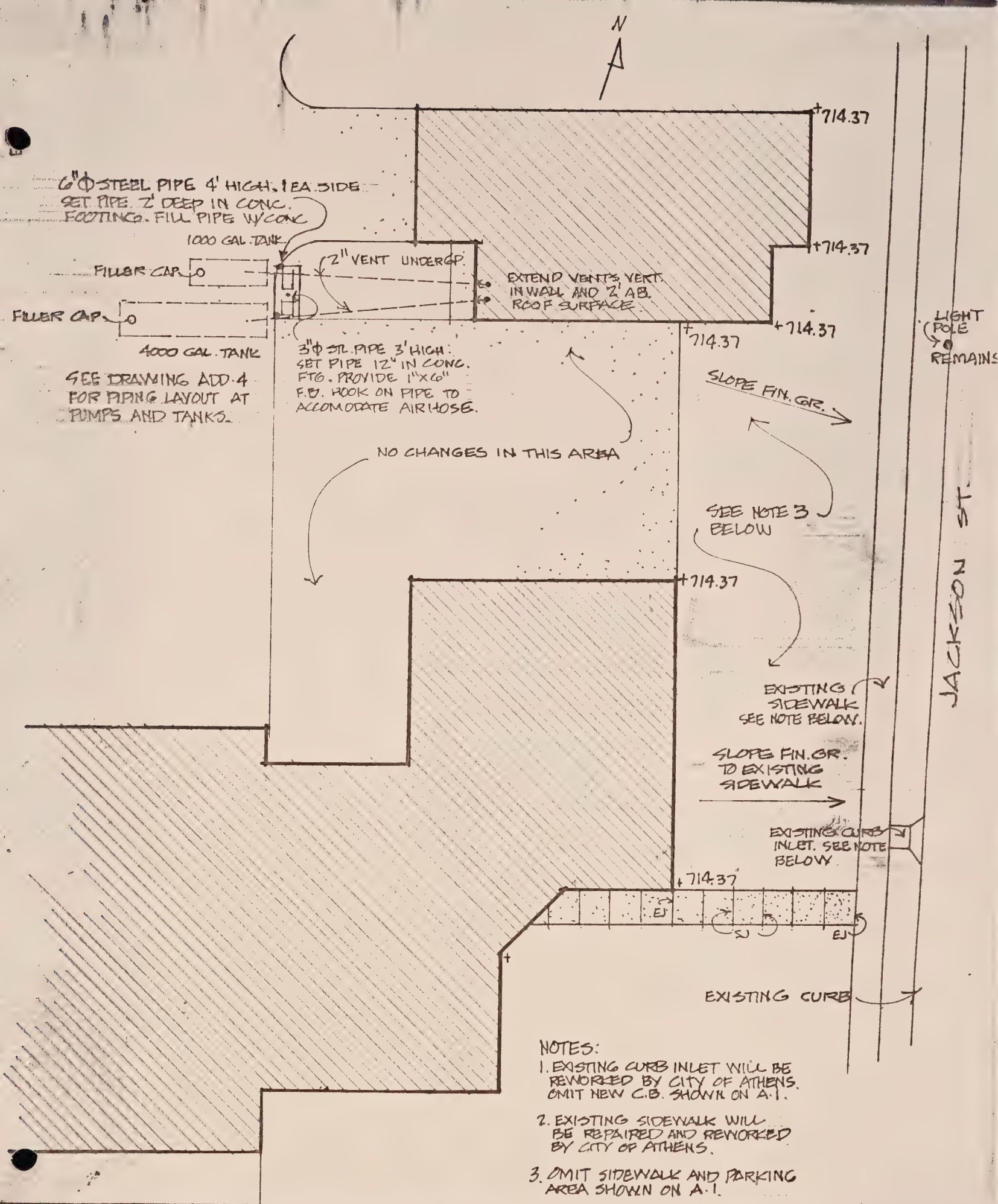


HEADQUARTERS FIRE STATION.
CITY OF ATHENS

ADAMS AND HOMAN, ARCHITECTS

2·21·78

ADD·2


N
6"Φ STEEL PIPE 4' HIGH, 1 EA. SIDE SET PIPE 2' DEEP IN CONC. FOOTINGS. FILL PIPE W/CONC
1000 GAL. TANK
FILLER CAP
2" VENT UNDERGR.
EXTEND VENTS VERT. IN WALL AND 2' AB. ROOF SURFACE
FILLER CAP
4000 GAL. TANK
SEE DRAWING ADD-4 FOR PIPING LAYOUT AT PUMPS AND TANKS.
3"Φ STL. PIPE 3' HIGH. SET PIPE 12" IN CONC. FTG. PROVIDE 1"x6" F.B. HOOK ON PIPE TO ACCOMODATE AIRHOSE.
+714.37
+714.37
+714.37
+714.37
+714.37
LIGHT POLE REMAINS
SLOPE FIN. GR.
NO CHANGES IN THIS AREA
SEE NOTE 3 BELOW
EXISTING SIDEWALK SEE NOTE BELOW.
SLOPE FIN. GR. TO EXISTING SIDEWALK
EXISTING CURB INLET. SEE NOTE BELOW
EJ
EJ
EJ
EXISTING CURB
JACKSON ST.

NOTES:

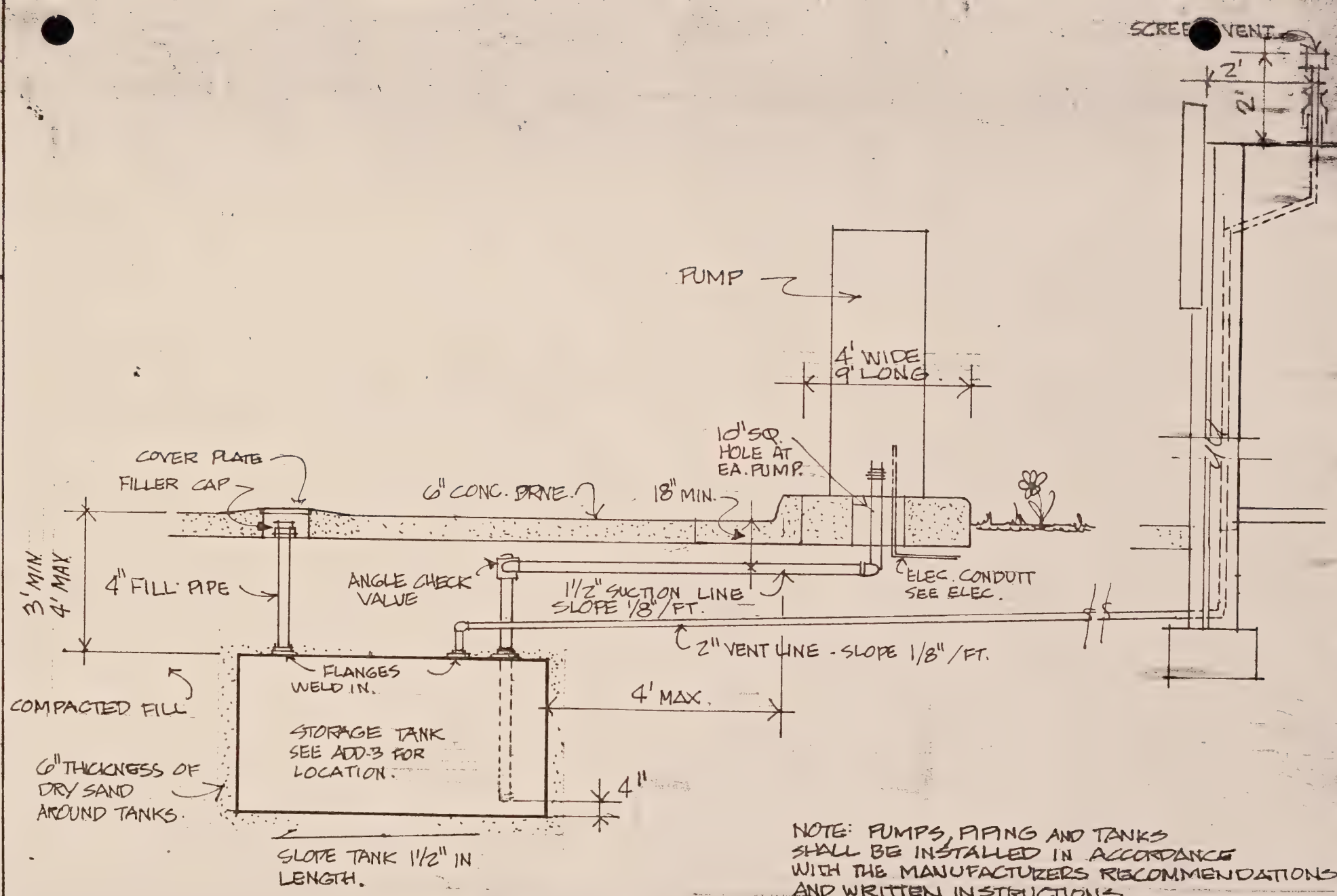
1. EXISTING CURB INLET WILL BE REWORKED BY CITY OF ATHENS. OMIT NEW C.B. SHOWN ON A-1.
2. EXISTING SIDEWALK WILL BE REPAIRED AND REWORKED BY CITY OF ATHENS.
3. OMIT SIDEWALK AND PARKING AREA SHOWN ON A-1.

HEADQUARTERS FIRE STATION
CITY OF ATHENS

ADAMS AND HOMAN, ARCHITECTS

2-21-78

ADD-3



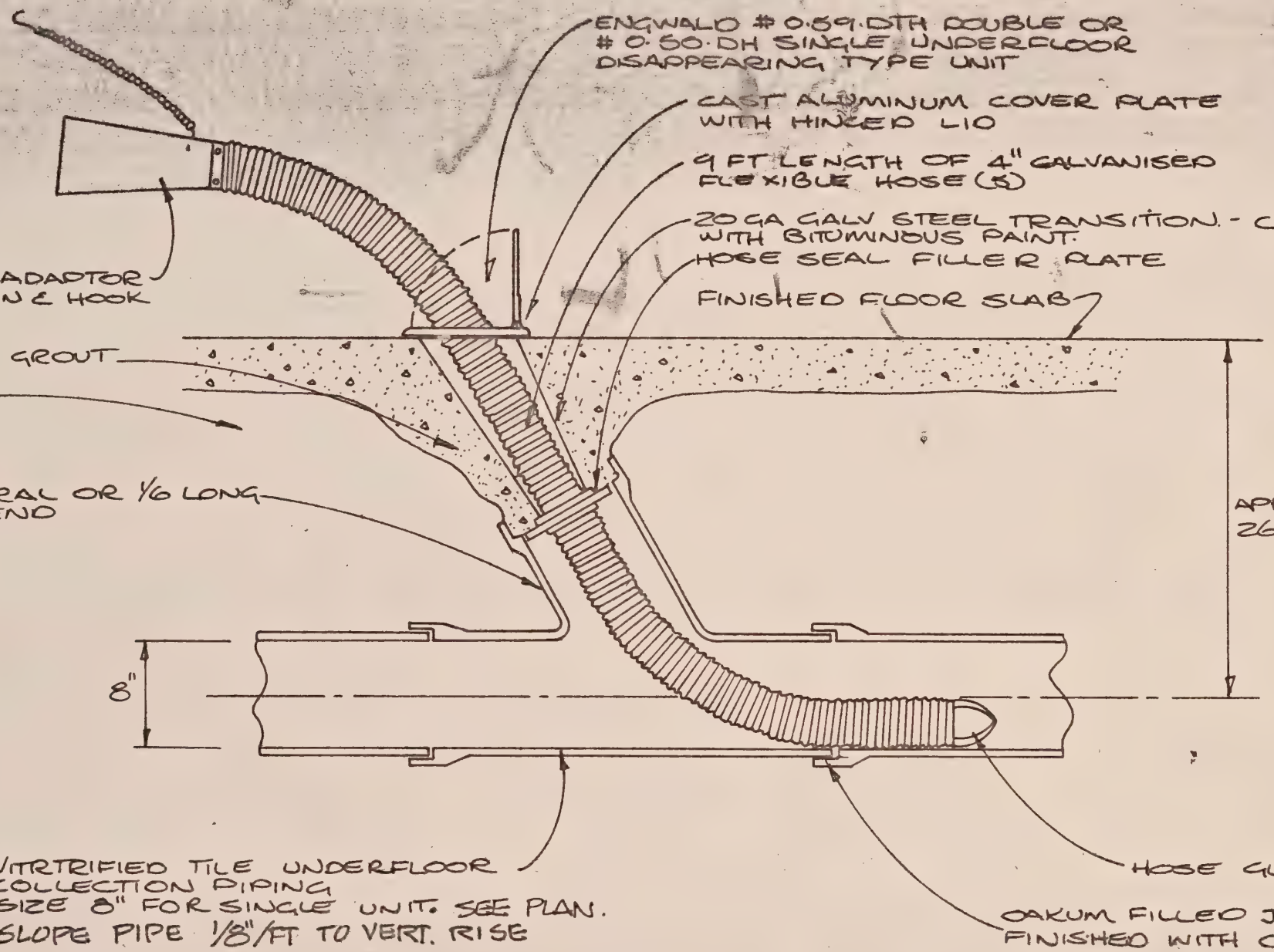
NOTE: PUMPS, PIPING AND TANKS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS AND WRITTEN INSTRUCTIONS.

SCHEMATIC SECTION - PUMP AND TANK

NOT TO SCALE.

HEADQUARTERS FIRE STATION
CITY OF ATHENS
ADAMS AND HOMAN, ARCHITECTS

2-21-78
ADD-4



UNDERFLOOR EXHAUST DUCT DETAIL

SCALE: NONE

2.21.78

ADD-5

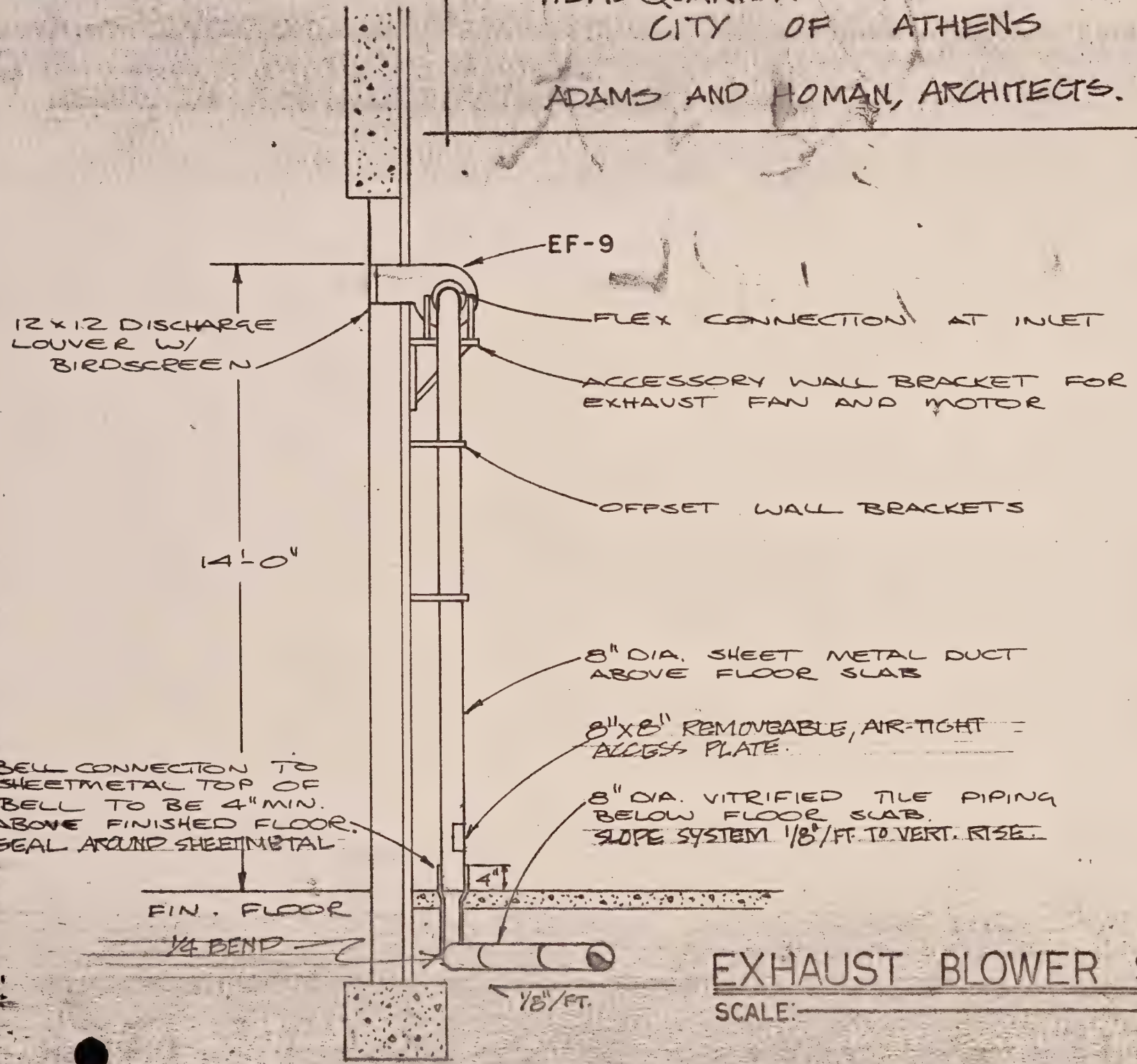
HEADQUARTERS FIRE STATION
CITY OF ATHENS
ADAMS AND HOMAN, ARCHITECTS.

HEADQUARTERS FIRE STATION
CITY OF ATHENS

ADAMS AND HOMAN, ARCHITECTS.

2.21.78

ADD-6


EF-9
12 x 12 DISCHARGE LOUVER W/ BIRDSCREEN
FLEX CONNECTION AT INLET
ACCESSORY WALL BRACKET FOR EXHAUST FAN AND MOTOR
OFFSET WALL BRACKETS
14'-0"
8" DIA. SHEET METAL DUCT ABOVE FLOOR SLAB
8"X8" REMOVEABLE, AIR-TIGHT ACCESS PLATE
8" DIA. VITRIFIED TILE PIPING BELOW FLOOR SLAB. SLOPE SYSTEM 1/8"/FT TO VERT. RISE.
BELL CONNECTION TO SHEETMETAL TOP OF BELL TO BE 4" MIN. ABOVE FINISHED FLOOR. SEAL AROUND SHEETMETAL
4"
FIN. FLOOR
1/4 BEND
1/8"/FT.

EXHAUST BLOWER SECTION

SCALE: NONE

ADDENDUM NO. 2

ADAMS AND HOMAN, ARCHITECTS
2936 VINEVILLE AVENUE
MACON, GEORGIA 31204

MARCH 6, 1978

RE: HEADQUARTERS FIRE STATION
ATHENS, GEORGIA

The attention of bidders is called to the fact that the provisions which have been deleted from the trade sections or elsewhere are possibly being omitted because they already appear in the General Conditions of the contract, in the Instructions to Bidders, or some other portion of the contract documents. Bidders should read all of the contract documents from which it will readily appear that the omissions set forth in this addendum do not necessarily alter the obligations of the contract, but on the contrary, will result in the avoidance of ambiguity which might be created by the inclusion of repetitious statements.

Specifications and drawings entitled "HEADQUARTERS FIRE STATION, ATHENS, GEORGIA", dated January 20, 1978, are hereby amended under the date of March 6, 1978.

A2-01 ADDENDUM NO. 1

A. Item A1-28, Change "15A.07" to "15A.14".

A2-02 SECTION 8F - FINISH HARDWARE, THRESHOLDS, WEATHERSTRIPPING

A. Add as paragraph 2.T.

Door signs shall be 1/8" ES plastic 2" high by length required with 1" Normal Style Letters in color to be selected by Architect. See door schedules. Mount with 3M double faced tape. Cover entire back of sign with tape.

A2-03 SECTION 15A - PLUMBING

A. Paragraph 15A.20 - At fixture P-11, add faucets, Kohler K-7856 or American Standard No. 4141.073. Provide line from tailpieces to grease trap.

A2-04 DRAWING E-2

A. Main Floor Power and Communication Plan
(1) On right side of building adjacent to space 115, move emergency generator and underground fuel tank toward CU-2 approximately 4'. Omit barriers.

A2-05 SECTION 7E - WATERPROOFING

A. Add as paragraph 3.C. - Underslab waterproofing shall be installed under ground level floor slab.

B. Add as paragraph 3.D. - Below grade wall waterproofing shall be installed on the fill side of the ground level concrete retaining wall which forms the east perimeter wall and along the retaining wall abutting the north concrete drive. Extend waterproofing to the end of the 4" drain line at elevation noted 711 on Site Plan.

A2-06 DRAWING A-1

A. Site Plan - Add note that 4" drain line behind retaining walls shall be sloped 1/2% minimum.

END OF ADDENDUM NO. 2

ADDENDUM NO. 3

ADAMS AND HOMAN, ARCHITECTS
2936 VINEVILLE AVENUE
MACON, GEORGIA 31204

MARCH 8, 1978

RE: HEADQUARTERS FIRE STATION
ATHENS, GEORGIA

The attention of bidders is called to the fact that the provisions which have been deleted from the trade sections or elsewhere are possibly being omitted because they already appear in the General Conditions of the contract, in the Instructions to Bidders, or some other portion of the contract documents. Bidders should read all of the contract documents from which it will readily appear that the omissions set forth in this addendum do not necessarily alter the obligations of the contract, but on the contrary, will result in the avoidance of ambiguity which might be created by the inclusion of repetitious statements.

Specifications and drawings entitled "HEADQUARTERS FIRE STATION, ATHENS, GEORGIA", dated January 20, 1978, are hereby amended under the date of March 8, 1978.

A3-01 ADDENDUM NO. 1

A. Item A1-28, paragraph E. - Delete paragraph in its entirety and substitute the following:
Contractor shall have option to install hub and spigot cast iron piping with neoprene gasket in lieu of hub and spigot type at all underground locations.

END OF ADDENDUM NO. 3

INDEX TO SPECIFICATIONS

Index to Sections

SECTION NUMBER	TITLE	PAGE
A	Advertisement for Bids	A-1
B	Information for Bidders	B-1 to B-4
C	Proposal Form	C-1 to C-4
D	Bonds and Agreement	D-1 to D-11
E	General Conditions	E-1 to E-29
F	Supplementary General Conditions	F-1 to F-14
DIVISION 1 - GENERAL REQUIREMENTS		
Section 1A	Alternates	1A-1
DIVISION 2 - SITE WORK		
Section 2A	Earthwork	2A-1 to 2A-2
Section 2B	Soil Poisoning	2B-1 to 2B-2
DIVISION 3 - CONCRETE		
Section 3A	Cast-In-Place Concrete and Reinforcement	3A-1 to 3A-4
Section 3B	Light Weight Cementitious Roof Deck	3B-1 to 3B-3
Section 3C	Precast Concrete Panels	3C-1 to 3C-3
DIVISION 4 - MASONRY		
Section 4A	Masonry Mortar	4A-1
Section 4B	Clay Masonry Units	4B-1 to 4B-2
Section 4C	Hollow Concrete Masonry Units	4C-1 to 4C-3
Section 4D	Masonry Reinforcement	4D-1
DIVISION 5 - METALS		
Section 5A	Structural Steel	5A-1 to 5A-3
Section 5B	Steel Joist	5B-1 to 5B-2
Section 5C	Miscellaneous Metals	5C-1
Section 5D	Metal Grate and Frame	5D-1

DIVISION 6 - CARPENTRY

Section 6A	Rough Carpentry	6A-1
Section 6B	Batt Insulation	6B-1
Section 6C	Finish Carpentry, Millwork	6C-1 to 6C-2
Section 6D	Cabinetwork	6D-1 to 6D-2

DIVISION 7 - MOISTURE PROTECTION

Section 7A	Built-Up Roofing	7A-1 to 7A-3
Section 7B	Sheet Metal Work	7B-1
Section 7C	Dampproofing	7C-1
Section 7D	Caulk	7D-1
Section 7E	Waterproofing	7E-1 to 7E-2

DIVISION 8 - DOORS, WINDOWS, GLASS

Section 8A	Hollow Metal Frames	8A-1 to 8A-2
Section 8B	Hollow Metal Doors	8B-1 to 8B-2
Section 8C	Wood Doors	8C-1
Section 8D	Metal Windows	8D-1 to 8D-2
Section 8E	Glass, Glazing	8E-1 to 8E-2
Section 8F	Finish Hardware, Thresholds, Weatherstripping	8F-1 to 8F-5
Section 8G	Aluminum Storefront	8G-1

DIVISION 9 - FINISHES

Section 9A	Terrazzo	9A-1 to 9A-3
Section 9B	Acoustical Tile Ceiling	9B-1 to 9B-2
Section 9C	Ceramic Tile	9C-1 to 9C-2
Section 9D	Lathing, Plaster, Stucco	9D-1 to 9D-3
Section 9E	Painting	9E-1 to 9E-5
Section 9F	Vinyl Base	9F-1
Section 9G	Special Coatings	9G-1
Section 9H	Carpet	9H-1
Section 9I	Fireproofing	9I-1

DIVISION 10 - SPECIALTIES

Section 10A	Toilet Compartments, Toilet Accessories	10A-1 to 10A-2
Section 10B	Fire Extinguishers	10B-1
Section 10C	Metal Lockers	10C-1
Section 10D	Chalkboards, Tackboards	10D-1 to 10D-2
Section 10E	Metal Files	10E-1
Section 10F	Overhead Door	10F-1 to 10F-2
Section 10G	Kitchen Equipment	10G-1 to 10G-2
Section 10H	Miscellaneous Equipment	10H-1 to 10H-2
Section 10I	Gas Pumps and Tanks	10I-1 to 10I-

DIVISIONS 11 THROUGH 14 - OMITTED

DIVISION 15 - MECHANICAL

Section 15A	Plumbing	15A-1 to 15A-16
Section 15B	Heating, Ventilating and Air Conditioning	15B-1 to 15B-17

DIVISION 16 - ELECTRICAL

Section 16	Electrical	16-1 to 16-18

SECTION A

ADVERTISEMENT FOR BIDS

1. Sealed proposals from qualified general contractors are requested for the construction of "HEADQUARTERS FIRE STATION", Athens, Georgia, in accordance with plans and specifications prepared by Adams and Homan, Architects, Macon, Georgia. Bids will be received by The City of Athens, in Room 305 at City Hall, Athens, Georgia until 3:00 P.M., March 7, 1978. At this time bids will be opened and read publicly. A statement of the bidders qualifications is required with each proposal.

2. Bids in order to be considered must be accompanied by a bid bond payable to the Owner in an amount not less than 5% of the BASE BID. This bid security shall become payable to the Owner only if bidder to whom award is made should fail to execute contract with the Owner and furnish bond in accordance with the terms of his proposal within ten (10) days after notification of award. No bid may be withdrawn for a period of forty-five (45) days after date of opening. The contract, if awarded, will be on a lump sum basis.

3. The contractor will deliver to the Owner a Performance Bond and Payment Bond in the amounts equal to 100% of the total contract price. Bonds will be executed by the Contractor, as principal, and a corporate surety authorized to do business in the State of Georgia, and acceptable to the Owner. Surety agents must have a local agent located and authorized to do business in Clarke County, Georgia.

4. All persons or firms submitting bids on said project shall be required to comply with the Federal Labor Standards Provisions General Conditions, Section E, Subsection 50 through 68(a).

5. Bidding documents may be obtained at the office of the Architects, ADAMS AND HOMAN, 2936 VINEVILLE AVENUE, MACON, GEORGIA 31204. Applications for documents together with a deposit of $50.00 per set should be filed promptly with the Architect. Bidding material will be forwarded, shipping charges collect, as soon as possible, upon receiving deposit. The full amount of deposit for two sets of bidding documents will be refunded to each General Contractor who submits bona fide bid upon return of such sets in good condition within 45 days after date of opening bids. All other deposits will be refunded with deductions of $20.00 per set upon return of same in good condition within 45 days after date of opening of bids. Partial sets of bidding documents will not be issued.

6. The Owner reserves the right to reject any or all bids, to waive technicalities and informalities, and to retain discretion in adoption of alternates. No conditional bids will be accepted.

BY: Mayor and Council of the
City of Athens, Georgia

SECTION B

INFORMATION FOR BIDDERS

1. **Receipt and Opening of Bids**

The Mayor and Council of The City of Athens (herein called the "Owner"), invites bids on the form attached hereto, all blanks of which must be appropriately filled in. Bids will be received by the Owner in Room 305 of City Hall until 3:00 P.M. o'clock EST time, March 7, 1978, and then publicly opened and read aloud. The envelopes containing the bids must be sealed, addressed to Mayor and Council, City of Athens and designated as Bid for "Construction of Headquarters Fire Station".

The Owner may consider informal any bid not prepared and submitted in accordance with the provisions hereof and may waive any informalities or reject any and all bids. Any bid may be withdrawn prior to the above scheduled time for the opening of bids or authorized postponement thereof. Any bid received after the time and date specified shall not be considered. No bidder may withdraw a bid within 45 days after the actual date of the opening thereof.

2. Preparation of Bid

Each bid must be submitted on the prescribed form. All blank spaces for bid prices must be filled in, in ink or typewritten in both words and figures.

Each bid must be submitted in a sealed envelope bearing on the outside the name of the bidder, his address, and the name of the project for which the bid is submitted. If forwarded by mail, the sealed envelope containing the bid must be enclosed in another envelope addressed as specified in the bid form.

3. Subcontracts

The bidder is specifically advised that any person, firm, or other party to whom it is proposed to award a subcontract under this contract be acceptable to the Owner and the Department of Housing and Urban Development.

4. Telegraphic Modification

Any bidder may modify his bid by telegraphic communication at any time prior to the scheduled closing time for receipt of bids, provided such telegraphic communication is received by the Owner prior to the closing time, and, provided further, the Owner is satisfied that a written confirmation of the telegraphic modification over the signature of the bidder was mailed prior to the closing time. The telegraphic communication should not reveal the bid price but should provide the addition or subtraction or other modification so that the final prices or terms will not be known by the Owner until the sealed bid is opened. If written confirmation is not received within two days from the closing time, no consideration will be given to the telegraphic modification.

5. Qualifications of Bidder

The Owner may make such investigations as he deems necessary to determine the ability of the bidder to perform his work, and the bidder shall furnish to the Owner all such information and data for this purpose as the Owner may request. The Owner reserves the right to reject any bid if the evidence submitted by, or investigation of, such bidder fails to satisfy the Owner that such bidder is properly qualified to carry out the obligations of the contract and to complete the work contemplated therein. Conditional bids will not be accepted.

6. Bid Security

Each bid must be accompanied by cash, certified check of the bidder, or a bid bond prepared on the form of bid bond attached hereto, duly executed by the bidder as principal and having as surety thereon a surety company approved by the Owner, in the amount of 5% of the bid. Such cash, checks or bid bonds will be returned to all except the three lowest bidders within three days after the opening of bids, and the remaining cash, checks, or bids bonds will be returned promptly after the Owner and the accepted bidder have executed the contract, or, if no award has been made within 45 days after the date of the opening of bids, upon demand of the bidder at any time thereafter, so long as he has not been notified of the acceptance of his bid.

7. Liquidated Damages for Failure to Enter Into Contract

The successful bidder, upon his failure or refusal to execute and deliver the contract and bonds required within 10 days after he has received notice of the acceptance of his bid, shall forfeit to the Owner, as liquidated damages for such failure or refusal, the security deposited with his bid.

8. Time of Completion and Liquidated Damages

Bidder must agree to commence work within ten days of a date to be specified in a written "Notice To Proceed" of the Owner and to fully complete the project within the number of consecutive calendar days shown in his proposal form. Bidder must agree also to pay as liquidated damages, the sum of $100.00 for each consecutive calendar day thereafter as herein provided in the General Conditions.

9. Conditions of Work

Each bidder must inform himself fully of the conditions relating to the construction of the project and the employment of labor thereon. Failure to do so will not relieve a successful bidder of his obligation to furnish all material and labor necessary to carry out the provisions of his contract. Insofar as possible the contractor, in carrying out his work, must employ such methods or means as will not cause any interruption of or interference with the work of any other contractor.

10. Addenda and Interpretations

No interpretation of the meaning of the plans, specifications or other pre-bid documents will be made to any bidder orally. Every request for such interpretation should be in writing addressed to ADAMS AND HOMAN, ARCHITECTS at 2936 Vineville Avenue, Macon, Georgia 31204, and to be given consideration must be received at least ten days prior to the date fixed for the opening of bids. Any and all such interpretations and any supplemental instructions will be in the form of written addenda to the specifications which, if issued, will be mailed by certified mail with return receipt requested to all prospective bidders (at the respective addresses furnished for such purposes), not later than three days prior to the date fixed for the opening of bids. Failure of any bidder to receive any such addendum or interpretation shall not relieve such bidder from any obligation under his bid as submitted. All addenda so issued shall become part of the contract documents.

11. Security for Faithful Performance

Simultaneously with his delivery of the executed contract, the Contractor shall furnish a surety bond or bonds as security for faithful performance of this contract and for the payment of all persons performing labor on the project under this contract and furnishing materials in connection with this contract, as specified in the General Conditions included herein. The surety on such bond or bonds shall be a duly authorized surety company satisfactory to the Owner.

12. Power of Attorney

Attorneys-in-fact who sign bid bonds or contract bonds must file with each bond a certified and effectively dated copy of their power of attorney.

13. Notice of Special Conditions

Attention is particularly called to those parts of the contract documents and specifications which deal with the following:

(a) Inspection and testing of materials
(b) Insurance requirements
(c) Wage rates
(d) Stated allowances

14. Laws and Regulations

The bidder's attention is directed to the fact that all applicable State laws, municipal ordinances, and the rules and regulations as amended as of the date of this contract of all authorities having jurisdiction over construction of the project shall apply to the contract throughout, and they will be deemed to be included in the contract the same as though herein written out in full.

15. Method of Award - Lowest Qualified Bidder

If at the time this contract is to be awarded, the lowest base bid submitted by a responsible bidder does not exceed the amount of funds then estimated by the Owner as available to finance the contract, the contract

will be awarded on the base bid only. If such bid exceeds such amount, the Owner may reject all bids or may award the contract on the base bid combined with such deductible alternates in any order or fashion listed in the Form of Bid, as produces a net amount which is within the available funds.

16. Obligation of Bidder

At the time of the opening of bids each bidder will be presumed to have inspected the site and to have read and to be thoroughly familiar with the plans and contract documents (including all addenda). The failure or omission of any bidder to examine any form, instrument or document shall in no way relieve any bidder from any obligation in respect of his bid.

SECTION C

PROPOSAL FORM

The Mayor and Council
of the City of Athens, Georgia

Date: _____

Re: Headquarters Fire Station
City of Athens, Georgia

Gentlemen:

C-01. Having carefully examined the specifications entitled HEADQUARTERS FIRE STATION, and the drawings of the same title numbered A1 to A14, inclusive, A1 to S5, inclusive, P1 and P2, inclusive, M1 and M2, inclusive, E1 to E3, inclusive and U1, all dated January 20, 1978 and Addendum (a) No. (s) _____ as well as the premises and conditions affecting the work, the undersigned proposes to furnish all services, labor and materials called for by them for the entire work in accordance with the aforesaid documents for the sum of _____

_____

Dollars ($_____) which sum is hereinafter called the "Base Bid".

C-02. The undersigned further proposes that should the following alternate be accepted and be incorporated in the contract, the Base Bid will be altered in each case as follows:

Alternate No. 1 - Omit Vehicle Maintenance Building

Deduct the sum of _____

_____ Dollars ($_____)

C-03. For and in consideration of the sum of $1.00, the receipt of which is hereby acknowledged, the undersigned agrees that this proposal may not be revoked or withdrawn after the time set for the opening of bids but shall remain open for acceptance for a period of forty-five (45) days following such time.

C-04. In case he be notified in writing by mail, telegraph, or delivery of the acceptance of this proposal within forty-five (45) days after the time set for the opening of bids, the undersigned agrees to execute within ten (10) days the Construction Agreement for the work for the above stated compensation and at the same time to furnish and deliver to the Owner a performance bond and a payment bond in the form and amount required.

C-05. The undersigned agrees to commence actual physical work on the site with an adequate force and equipment within ten (10) days of a date to be specified in a written order of the Owner and to complete fully all work in _____ consecutive calendar days from and including said date.

C-06. Inclosed herewith is a bid bond in the amount of

_____

_____Dollars ($_____)
being not less than 5% of the Base Bid. The undersigned agrees that the above stated amount is the proper measure of liquidated damages which the Owner will sustain by the failure of the undersigned to execute the contract and to furnish the performance bond and the payment bond in case this proposal is accepted and further agrees to the following:

C-07. If this proposal is accepted within forty-five (45) days after the date set for the opening of bids and the undersigned fails to execute the contract within ten (10) days after written notice of such acceptance or if he fails to furnish both a performance bond and a payment bond, the obligation of the bid bond will remain in full force and effect and the money payable thereon shall be paid into the funds of the Owner as liquidated damages for such failure; otherwise the obligation of the bond will be null and void.

C-08. The bidder submits the following statement of bidder's qualifications.

BIDDER'S QUALIFICATIONS

(to be subscribed and sworn to before a notary public)

Name of bidder _____

Street Address _____

When Organized _____

Where Incorporated _____

Plan of Organization _____

_____

Number of years engaged in the contracting business under the present firm name

_____

Credit available for this contract $ _____

Amount of contracts now in hand $ _____

Projects (Constructed or under construction) of comparable size and complexity: (List Four)

Project: _____ Approx. Cost _____

_____ _____

_____ _____

_____ _____

The bidder has never refused to sign a contract at the original bid.

The bidder has never been declared in default on a contract.

Remarks: _____

_____

Date _____

Firm Name _____

By _____

Title _____

_____
(Notary Public)

B-09. The foregoing statement of qualifications is submitted under oath.

Respectfully submitted,

Name _____

Street Address _____

_____

By _____

Title _____

The full names and addresses of persons and firms interested in the foregoing bids as principals are as follows:

_____

_____

_____

The legal name of the bidder is:

_____

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned, _____ _____, as Principal, and _____ _____, as Surety, are hereby held and firmly bound unto the Mayor and Council of the City of Athens hereinafter known as the "Owner", in the penal sum of _____ _____Dollars ($_____) for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors, and assigns.

Signed, this _____day of _____, 19___.

The Condition of the above obligation is such that whereas the Principal has submitted to the Mayor and Council of the City of Athens, a certain Bid attached hereto and made a part hereof to enter into a contract in writing, for the complete work of _____ _____, for the amount of _____ _____ Dollars ($_____).

NOW, THEREFORE:

(a) If said Bid shall be rejected, or in the alternate,

(b) If said Bid shall be accepted and the Principal shall execute and deliver a contract in the Form of Contract attached hereto (Properly completed in accordance with said Bid) and shall furnish a bond for his faithful performance of said contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said Bid, then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulated and agrees that the obligations of said Surety and its bond shall be in no way impaired or affected by any extension of the time within which the Owner may accept such Bid; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their property officers, the day and year first set forth above.

_____(L.S.)
Principal

_____
Surety

By:_____

IMPORTANT - Surety companies executing bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the project is located.

CONSTRUCTION AGREEMENT

STATE OF GEORGIA

CLARKE COUNTY

THIS AGREEMENT, made and entered into on the _____ day of _____ 19___, by and between the Mayor and Council of the City of Athens, party of the first part (hereinafter called the "Owner"), and _____ _____, party of the second part (hereinafter called the "Contractor").

WITNESSETH:

That the contractor, for the consideration hereinafter fully set out, hereby agrees with the Owner as follows:

1. That the Contractor will furnish all equipment, tools, materials, skill and labor of every description necessary to carry out and complete in a good, firm, substantial and workmanlike manner, the work specified, in strict conformity with the drawings and the specifications hereinafter set forth, which drawings and specifications, together with the Proposal made by the Contractor, the Advertisement for Bids, Instructions to Bidders and Special Provisions, General Conditions, this Agreement, Performance and Payment Bonds, and all Addenda annexed hereto, shall form essential parts of this Agreement, as if fully contained herein. The work covered by this Agreement includes all work as shown on the drawings, specified and listed in the attached Proposal.

2. That the Contractor shall commence the work to be performed under this Agreement on a date to be specified in a written order of the Owner's Engineer and shall fully complete all work hereunder within _____ consecutive calendar days from said date, except as otherwise provided in these documents for extensions of the above time limit. Time is of the essence of this contract and the Contractor shall pay to the Owner, not as a penalty, but as liquidated damages the sum of one hundred ($100.00) dollars for each calendar day that he shall be in default of completing the work within the time limit named herein. Because of the difficulty of fixing damages suffered by the Owner on account of such default, damages are herein agreed upon as stated.

3. The Owner hereby agrees to pay to the Contractor for the faithful performance of this Agreement, subject to additions and deductions as provided in the Specifications or Proposal, in lawful money of the United States, the sum of _____ Dollars ($_____).

4. No later than the 15th day of each calendar month, as the work progresses the Owner shall make partial payments to the Contractor on the value of labor and materials incorporated into the work and of materials on hand at the site of the work, except cement and materials subject to deterioration, for, and including the last day of the preceding month, less payments already made and less deductions for any unaccepted or defective work.

5. Upon submission by the Contractor of evidence satisfactory to the Owner that all payrolls, material bills and other costs incurred by the Contractor in connection with the construction of the work have been paid in full, final payment on account of this Agreement shall be made within thirty (30) days after the completion by the Contractor of all work covered by this Agreement and the acceptance of such work by the Owner.

6. It is further mutually agreed between the parties hereto that if, at any time after the execution of this Agreement and the Surety and Payment Bonds hereto attached for its faithful performance, the Owner shall deem the Surety or Sureties upon such bonds to be unsatisfactory, or if, for any reason, such bond ceases to be adequate to cover performance of the work, the Contractor shall, at his expense, within five (5) days after the receipt of notice from the Owner so to do, furnish additional bond or bonds in such form and amount and with such surety or sureties as shall be satisfactory to the Owner. In such event no further payment to the Contractor shall be deemed to be due under this Agreement until such new additional security for the faithful performance of the work shall be furnished in manner and form satisfactory to the Owner.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the day, month and year first above written in six (6) counterparts, each of which shall, without proof or accounting for the other counterparts be deemed an original contract.

WITNESS (As to Contractor)
Signed and Sealed in the
presence of:

_____

_____

*CONTRACTOR

_____

By: _____

Title: _____

ATTEST: (SEAL)

_____
Secretary

(SEAL)

_____
(Recorder)

MAYOR AND COUNCIL OF THE CITY OF ATHENS

By: _____
(Mayor)

APPROVED AS TO FORM BEFORE EXECUTION

By: _____
Attorney, for the Mayor
and Council of the City
of Athens

*Note: If the Contractor is a corporation, the Agreement shall be signed by the President or Vice President, attested by the Secretary and the corporate seal affixed. If the Contractor is a partnership, the Agreement shall be signed in the Partnership name by one of the partners, with indication that he is a general partner.

PERFORMANCE BOND

CLARKE COUNTY)
) ss:
STATE OF GEORGIA)

KNOW ALL MEN BY THESE PRESENTS, that we _____ _____, hereinafter known as the "Contractor", as principal, and _____ _____, as surety, are held and firmly bound unto the Mayor and Council of the City of Athens, hereinafter known as the "Owner", in the penal sum of _____ _____ Dollars ($_____) lawful money of the United States of America, to be paid to the Owner, for the use and benefit of the said obligee, and of all persons doing work or furnishing skill, tools, machinery or materials under or for the purpose of the contract hereinafter named, for which payment, well and truly to be made, we bind ourselves, our successors and our several respective heirs, assigns, executors, and administrators, jointly and severally, firmly by these presents.

SEALED WITH OUR SEALS AND DATED THIS THE _____ DAY OF _____, 19___.

WHEREAS, the above bounden _____ _____ by an instrument in writing, bearing even date, with these presents, has contracted with the Owner to furnish all equipment, tools, materials, skill and labor for the completion of the work covered by the following items of the attached Proposal for _____ _____ _____.

All work to be performed in strict accordance with the attached Agreement or Contract and Specifications, which Contract is by reference made a part hereof:

NOW, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the said _____ shall complete the work provided for in said Contract according to terms, and shall save the obligee hereunder free from all costs and charges that may accrue on account of the doing of the work specified in the contract, and shall comply with the laws appertaining to said Contract, then this obligation shall be null and void; otherwise, it shall remain in full force and effect.

AND THE FURTHER CONDITION OF THIS OBLIGATION IS SUCH THAT IF _____, as Contractor, shall fully and faithfully perform the work in accordance with the terms of the annexed contract therefor and the plans and specifications therein referred to, and provide the materials therein called for, and replace defective work or material for a period of one year after the completion of this contract, then this obligation shall be null and void; otherwise they, _____, as Contractor and _____, as Surety, jointly and severally agree to pay the Owner the difference between the sum to which the said _____ _____, as Contractor, would be entitled in the completion of the Contract, and that which the Owner may be obliged to pay for the completion of the work by Contract or otherwise, and agree to pay any damage, direct or indirect or consequential, which said Owner may sustain on account of such work or on account of the failure of said Contract, properly and in all things to keep and execute the provisions of the Contract.

And the said _____ as Contractor, and _____ as Surety, hereby further bind themselves, their successors, assigns, heirs, executors and administrators, jointly and severally, that they will indemnity and save harmless and will pay all amounts, damages, costs and judgements which may be recovered against, and all expenses incurred by, the Owner and all representatives of said Owner from or arising out of all or any suits, actions, or claims of any character brought on account of any injuries or damages sustained by any person or property in consequence of any neglect in safeguarding the work, or any such suit or claim arising from any other act, omission, negligence or misconduct of the Contractor, his agents, representatives, servants and employees in the performance of said work or of the repair of maintenance thereof, or the manner of doing the same, or the neglect of said Contractor, or agents or servants, or the improper performance of the said work by the Contractor or agents or servants, or the infringement of any patent rights by reason of the use of any equipment or materials furnished under the said Contract, and will also pay any damages for delay in performance within the time agreed, as stated in the Contract; further, failure so to do with such persons, firms, partnerships or corporation shall give them a direct right of action against the principal and surety under this obligation.

As the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration, or addition to the terms of the Contract or to the work to be performed thereunder, or the specifications accompanying the same, shall in any wise affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the work or to the Specifications.

Without limiting the effect of any other provisions herein contained, this Bond is to be construed as a statutory bond under the provisions of Section 23-1705 of the 1933 Code of Georgia as amended to date.

IN WITNESS WHEREOF, the said _____ has caused _____ corporate seal to be hereto affixed, and these presents to be signed in its name by _____ _____ and the said _____ _____ as surety, has caused _____ _____ corporate seal to be hereto affixed and these presents to be signed in its name by _____ _____.

(As to Contractor)

*CONTRACTOR (SEAL)

Signed, sealed and delivered in the presence of:

_____

By: _____
(Name) (Title)

_____

ATTEST:

_____
Secretary

(As to Surety)

Signed, sealed and delivered in the presence of:

SURETY (SEAL)

_____

_____

By: _____
Attorney in Fact

APPROVED AS TO FORM:

_____
City Attorney

COUNTERSIGNED:

By: _____
Resident Agent
(Resident of Clarke County)

*NOTE: If the Principal is a corporation, the bond shall be signed by the President or a Vice-President, attested by the Secretary and the corporate seal affixed. If the Principal is a partnership, the bond shall be signed in the partnership name by one of the partners, with indication that he is a general partner.

Bond Approved _____
City Clerk

PAYMENT BOND

CLARKE COUNTY)
) ss:
STATE OF GEORGIA)

KNOW ALL MEN BY THESE PRESENTS, that we _____ _____, hereinafter known as the "Contractor", as principal, and _____ _____, as surety, are held and firmly bound unto the Mayor and Council of the City of Athens hereinafter known as the "Owner" in the penal sum of _____ Dollars ($_____) lawful money of the United States of America, to be paid to the Owner, for the use and benefit of the said obligee, and of all persons doing work or furnishing skill, tools, machinery or materials under or for the purpose of the contract hereinafter named, for which payment, well and truly to be made, we bind ourselves, our successors and our several respective heirs, assigns, executors, and administrators, jointly and severally, firmly by these presents.

SEALED WITH OUR SEALS AND DATED THIS THE _____ DAY OF _____, 19___.

WHEREAS, the above bounden _____ _____ by an instrument in writing, bearing even date, with these presents, has contracted with the Owner to furnish all equipment, tools, materials, skill and labor for the completion of the work covered by the following items of the attached Proposal for _____ _____. All work to be performed in strict accordance with the attached Agreement or Contract and Specifications, which Contract is by reference made a part hereof:

NOW, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the said _____ _____ and all subcontractors to whom any portion of the work provided for in the attached Agreement or Contract is sublet and all assignees of the said _____ _____ and of such subcontractors shall promptly make payments to all persons supplying him or them with labor, material, or supplies for or in the prosecution of the work provided for in such Contract, or in any amendment or extension of or addition to said Contract, and for the payment of reasonable attorneys fees, incurred by the claimant or claimants in suite on said bond, then the above obligations shall be void, otherwise to remain in full force and effect.

PROVIDED, however, that this bond is subject to the following conditions and limitations:

(a) Any person, firm or corporation that has furnished labor, materials, or supplies for or in the prosecution of the work provided for in said Contract shall have a direct right of action against the Contractor and Surety on this bond, which right of action shall be asserted in a proceeding, instituted in the County in which the work provided for in said contract is to be performed or in any County in which said Contractor or Surety does business. Such right of action shall be asserted in a proceeding instituted in the name of the claimant or claimants for his or their use and benefit against said Contractor and Surety or either of them (but not later than one year after the final settlement of said Contract) in which action such claim or claims shall be adjudicated and judgement rendered thereon.

(b) The Principal and Surety hereby designate and appoint the CITY CLERK OF ATHENS, GEORGIA as the Agent of each of them to receive and accept service of process or other pleading issued or filed in any proceeding instituted on this bond and hereby consent that such service shall be the same as personal service on the Contractor and/or Surety.

(c) In no event shall the Surety be liable for a greater sum than the penalty of this bond, or subject to any suit, action or proceeding thereon that is instituted later than one year after the final settlement of said Contract.

(d) This bond is given pursuant to the terms of Section 23-1705 of the 1933 Code of Georgia as amended as all the provisions of law with reference to this character of bond as set forth in said section or as may hereinafter be enacted are hereby made a part hereof to the same extent as if set out herein in full.

IN WITNESS WHEREOF, the said _____ has caused _____ corporate seal to be hereto affixed, and these presents to be signed in its name by _____ and the said _____ _____ as surety, has caused _____ corporate seal to be hereto affixed and these presents to be signed in its name by _____ _____.

(As to Contractor)

_____ (SEAL)
*CONTRACTOR

Signed, sealed and delivered in the presence of:

By: _____
(Name) (Title)

_____

_____

ATTEST:

(As to Surety)

_____
Secretary

Signed, sealed and delivered in the presence of:

_____

_____

SURETY: (SEAL)

_____

By: _____
Attorney in Fact

APPROVED AS TO FORM:

_____
City Attorney

COUNTERSIGNED:

By: _____
Resident Agent
(Resident of Clarke County)

*NOTE: If the Principal is a corporation, the bond shall be signed by the President or a Vice-President, attested by the Secretary and the Corporate seal affixed. If the Principal is a partnership, the bond shall be signed in the partnership name by one of the partners, with indication that he is a general partner.

SECTION E

GENERAL CONDITIONS

GENERAL CONDITIONS

1. Contract and Contract Documents

The project to be constructed pursuant to this contract will be financed with assistance from the Department of Housing and Urban Development and is subject to applicable Federal laws and regulations.

The Plans, Specifications and Addenda, hereinafter enumerated in Paragraph 1 of the Supplemental General Conditions shall form part of this Contract and the provisions thereof shall be as binding upon the parties hereto as if they were herein fully set forth. The table of contents, titles, headings, running headlines and marginal notes contained herein and in said documents are solely to facilitate reference to various provisions of the Contract Documents and in no way affect, limit or cast light on the interpretation of the provisions to which they refer.

1. Contract and Contract Drawings
2. Definitions
3. Additional Instructions and Detail Drawings
4. Shop or Setting Drawings
5. Materials, Services, and Facilities
6. Contractor's Title to Materials
7. Inspection and Testing of Materials
8. "Or Equal" Clause
9. Patents
10. Surveys, Permits, and Regulations
11. Contractor's Obligations
12. Weather Conditions
13. Protection of Work and Property--Emergency
14. Inspection
15. Reports, Records and Data
16. Superintendence by Contractor
17. Changes in Work
18. Extras
19. Time for Completion and Liquidated Damages
20. Correction of Work
21. Subsurface Conditions Found Different
22. Claims for Extra Cost
23. Right of Owner to Terminate Contract
24. Construction Schedule and Periodic Estimates
38. Quantities of Estimate
39. Lands and Rights-of-Way
40. General Guaranty
41. Conflicting Conditions
42. Notice and Service Thereof
43. Required Provisions Deemed Inserted
44. Protection of Lives and Health
45. Subcontracts
46. Equal Employment Opportunity
47. Interest of Member of Congress
48. Other Prohibited Interests
49. Use Prior to Owner's Acceptance
50. Federal Labor Standards Provisions (Applicability)
51. Minimum Wage Rates for Laborers and Mechanics
52. Underpayments of Wages or Salaries
53. Anticipated Costs of Fringe Benefits
54. Overtime Compensation Required by Contract Work Hours and Safety Standards Act
55. Employment of Apprentices/ Trainees
56. Employment of Certain Persons
57. Regulations Pursuant to So-Called "Anti-Kickback Act"
58. Employment of Laborers or Mechanics not Listed in Aforesaid Wage Determination Decision
59. Fringe Benefits not Expressed as Hourly Wage Rates
60. Posting Wage Determination Decisions and Authorized Wage Deductions

25. Payments to Contractor
26. Acceptance of Final Payment as Release
27. Payments by Contractor
28. Insurance
29. Contract Security
30. Additional or Substitute Bond
31. Assignments
32. Mutual Responsibility of Contractors
33. Separate Contracts
34. Subcontracting
35. Architect/Engineer's Authority
36. Stated Allowance
37. Use of Premises and Removal of Debris

61. Complaints, Proceedings, or Testimony by Employees
62. Claims and Disputes Pertaining to Wage Rates
63. Questions Concerning Certain Federal Statutes and Regulations
64. Payrolls and Basic Payroll Records of Contractor and Subcontractors
65. Specific Coverage of Certain Types of Work by Employees
66. Ineligible Subcontractors
67. Provisions to be Included in Certain Subcontracts
68. Breach of Foregoing Federal Labor Standards Provisions
68. (a) Attachment to Federal Labor Standards Provisions

2. Definitions

The following terms as used in this contract are respectively defined as follows:

(a) "Contractor": A person, firm or corporation with whom the contract is made by the Owner.
(b) "Subcontractor": A person, firm or corporation supplying labor and materials or only labor for work at the site of the project for, and under separate contract or agreement with, the Contractor.
(c) "Work on (at) the project": Work to be performed at the location of the project, including the transportation of materials and supplies to or from the location of the project by employees of the Contractor and any Subcontractor.

3. Additional Instructions and Detail Drawings

The Contractor will be furnished additional instructions and detail drawings as necessary to carry out the work included in the contract. The additional drawings and instructions thus supplied to the Contractor will coordinate with the Contract Documents and will be so prepared that they can be reasonably interpreted as part thereof. The Contractor shall carry out the work in accordance with the additional detail drawings and instructions. The Contractor and the Architect/Engineer will prepare jointly (a) a schedule, fixing the dates at which special detail drawings will be required, such drawings, if any, to be furnished by the Architect/Engineer in accordance with said schedule, and (b) a schedule fixing the respective dates for the submission of shop drawings, the beginning of manufacture, testing and installation of materials, supplies and equipment, and the completion of the various parts of the work; each such schedule to be subject to change from time to time in accordance with the progress of the work.

4. Shop or Setting Drawings

The Contractor shall submit promptly to the Architect/Engineer two copies of each shop or setting drawing prepared in accordance with the schedule predetermined as aforesaid. After examination of such drawings by the Architect/Engineer and the return thereof, the Contractor shall make such corrections to the drawings as have been indicated and shall furnish the Architect/Engineer with two corrected copies. If requested by the Architect/Engineer the Contractor must furnish additional copies. Regardless of corrections made in or approval given to such drawings by the Architect/Engineer, the Contractor will nevertheless be responsible for the accuracy of such drawings and for their conformity to the Plans and Specifications, unless he notifies the Architect/Engineer in writing of any deviations at the time he furnishes such drawings.

5. Materials, Services, and Facilities

(a) It is understood that except as otherwise specifically stated in the Contract Documents, the Contractor shall provide and pay for all materials, labor, tools, equipment, water, light, power, transportation, superintendence, temporary construction of every nature, and all other services and facilities of every nature whatsoever necessary to execute, complete, and deliver the work within the specified time.
(b) Any work necessary to be performed after regular working hours, on Sundays or Legal Holidays, shall be performed without additional expense to the Owner.

6. Contractor's Title to Materials

No materials or supplies for the work shall be purchased by the Contractor or by any Subcontractor subject to any chattel mortgage or under a conditional sale contract or other agreement by which an interest is retained by the seller. The Contractor warrants that he has good title to all materials and supplies used by him in the work, free from all liens, claims or encumbrances.

7. Inspection and Testing of Materials

(a) All materials and equipment used in the construction of the project shall be subject to adequate inspection and testing in accordance with accepted standards. The laboratory or inspection agency shall be selected by the Owner. The Owner will pay for all laboratory inspection service direct, and not as a part of the contract.
(b) Materials of construction, particularly those upon which the strength and durability of the structure may depend, shall be subject to inspection and testing to establish conformance with specifications and suitability for uses intended.

8. "Or Equal" Clause

Whenever a material, article or piece of equipment is identified on the plans or in the specifications by reference to manufacturers' or vendors' names, trade names, catalogue numbers, etc., it is intended merely to establish a standard; and, any material, article, or equipment of other manufacturers and vendors which will perform adequately the duties imposed by the general design will be considered equally acceptable provided the material, article, or equipment so proposed, is, in the opinion of the Architect/Engineer, of equal substance and function. It shall not be purchased or installed by the contractor without the Architect/Engineer's written approval.

9. Patents

(a) The Contractor shall hold and save the Owner and its officers, agents, servants, and employees harmless from liability of any nature or kind, including cost and expenses for, or on account of, any patented or unpatented invention, process, article, or appliance manufactured or used in the performance of the contract, including its use by the Owner, unless otherwise specifically stipulated in the Contract Documents.
(b) License or Royalty Fees: License and/or Royalty Fees for the use of a process which is authorized by the Owner of the project must be reasonable, and paid to the holder of the patent, or his authorized licensee, direct by the Owner and not by or through the Contractor.
(c) If the Contractor uses any design, device or materials covered by letters, patent or copyright, he shall provide for such use by suitable agreement with the Owner of such patented or copyrighted design, device or material. It is mutually agreed and understood, that, without exception, the contract prices shall include all royalties or costs arising from the use of such design, device or materials, in any way involved in the work. The Contractor and/or his Sureties shall indemnify and save harmless the Owner of the project from any and all claims for infringement by reason of the use of such patented or copyrighted design, device or materials or any trademark or copyright in connection with work agreed to be performed under this contract, and shall indemnify the Owner for any cost, expense or damage which it may be obliged to pay by reason of such infringement at any time during the prosecution of the work or after completion of the work.

10. Surveys, Permits, and Regulations

Unless otherwise expressly provided for in the Specifications, the Owner will furnish to the Contractor all surveys necessary for the execution of the work.

The Contractor shall procure and pay all permits, licenses and approvals necessary for the execution of his contract.

The Contractor shall comply with all laws, ordinances, rules, orders, and regulations relating to performance of the work, the protection of adjacent property, and the maintenance of passageways, guard fences or other protective facilities.

11. Contractor's Obligations

The Contractor shall and will, in good workmanlike manner, do and perform all work and furnish all supplies and materials, machinery, equipment, facilities and means, except as

herein otherwise expressly specified, necessary or proper to perform and complete all the work required by this contract, within the time herein specified, in accordance with the provisions of this contract and said specifications and in accordance with the plans and drawings covered by this contract any and all supplemental plans and drawings, and in accordance with the directions of the Architect/Engineer as given from time to time during the progress of the work. He shall furnish, erect, maintain, and remove such construction plant and such temporary works as may be required.

The Contractor shall observe, comply with, and be subject to all terms, conditions, requirements, and limitations of the contract and specifications, and shall do, carry on, and complete the entire work to the satisfaction of the Architect/Engineer and the Owner.

12. Weather Conditions

In the event of temporary suspension of work, or during inclement weather, or whenever the Architect/Engineer shall direct, the Contractor will, and will cause his subcontractors to protect carefully his and their work and materials against damage or injury from the weather. If, in the opinion of the Architect/Engineer, any work or materials shall have been damaged or injured by reason of failure on the part of the Contractor or any of his Subcontractors so to protect his work, such materials shall be removed and replaced at the expense of the Contractor.

13. Protection of Work and Property--Emergency

The Contractor shall at all times safely guard the Owner's property from injury or loss in connection with this contract. He shall at all times safely guard and protect his own work, and that of adjacent property from damage. The Contractor shall replace or make good any such damage, loss or injury unless such be caused directly by errors contained in the contract or by the Owner, or his duly authorized representatives.

In case of an emergency which threatens loss or injury of property, and/or safety of life, the Contractor will be allowed to act, without previous instructions from the Architect/Engineer, in a diligent manner. He shall notify the Architect/Engineer immediately thereafter. Any claim for compensation by the Contractor due to such extra work shall be promptly submitted to the Architect/Engineer for approval.

Where the Contractor has not taken action but has notified the Architect/Engineer of an emergency threatening injury to persons or damage to the work or any adjoining property, he shall act as instructed or authorized by the Architect/Engineer.

The amount of reimbursement claimed by the Contractor on account of any emergency action shall be determined in the manner provided in Paragraph 17 of the General Conditions.

14. Inspection

The authorized representatives and agents of the Department of Housing and Urban Development shall be permitted to inspect all work, materials, payrolls, records of personnel, invoices of materials, and other relevant data and records.

15. Reports, Records, and Data

The Contractor shall submit to the Owner such schedule of quantities and costs, progress schedules, payrolls, reports, estimates, records and other data as the Owner may request concerning work performed or to be performed under this contract.

16. Superintendence by Contractor

At the site of the work the Contractor shall employ a construction superintendent or foreman who shall have full authority to act for the Contractor. It is understood that such representative shall be acceptable to the Architect/Engineer and shall be one who can be continued in that capacity for the particular job involved unless he ceases to be on the Contractor's payroll.

17. Changes in Work

No changes in the work covered by the approved Contract Documents shall be made without having prior written approval of the Owner. Charges or credits for the work covered by the approved change shall be determined by one or more, or a combination of the following methods:

(a) Unit bid prices previously approved.
(b) An agreed lump sum.
(c) The actual cost of:
1. Labor, including foremen;
2. Materials entering permanently into the work;
3. The ownership or rental cost of construction plant and equipment during the time of use on the extra work;
4. Power and consumable supplies for the operation of power equipment;
5. Insurance;
6. Social Security and old age and unemployment contributions.

To the cost under (c) there shall be added a fixed fee to be agreed upon but not to exceed fifteen percent (15%) of the actual cost of the work. The fee shall be compensation to cover the cost of supervision, overhead, bond, profit and any other general expenses.

18. Extras

Without invalidating the contract, the Owner may order extra work or make changes by altering, adding to or deducting from the work, the contract sum being adjusted accordingly, and the consent of the Surety being first obtained where necessary or desirable. All the work of the kind bid upon shall be paid for at the price stipulated in the proposal, and no claims for any extra work or materials shall be allowed unless the work is ordered in writing by the Owner or its Architect/Engineer, acting officially for the Owner, and the price is stated in such order.

19. Time for Completion and Liquidated Damages

It is hereby understood and mutually agreed, by and between the Contractor and the Owner, that the date of beginning and the time for completion as specified in the contract of the work to be done hereunder are ESSENTIAL CONDITIONS of this contract; and it is further mutually understood and agreed that the work embraced in this contract shall be commenced on a date to be specified in the "Notice to Proceed."

The Contractor agrees that said work shall be prosecuted regularly, diligently, and uninterruptedly at such rate of progress as will insure full completion thereof within the time specified. It is expressly understood and agreed, by and between the Contractor and the Owner, that the time for the completion of the work described herein is a reasonable time for the completion of the same, taking into consideration the average climatic range and usual industrial conditions prevailing in this locality.

If the said Contractor shall neglect, fail or refuse to complete the work within the time herein specified, or any proper extension thereof granted by the Owner, then the Contractor does hereby agree, as a part consideration for the awarding of this contract, to pay to the Owner the amount specified in the contract, not as a penalty but as liquidated damages for such breach of contract as hereinafter set forth, for each and every calendar day that the Contractor shall be in default after the time stipulated in the contract for completing the work.

The said amount is fixed and agreed upon by and between the Contractor and the Owner because of the impracticability and extreme difficulty of fixing and ascertaining the actual damages the Owner would in such event sustain, and said amount is agreed to be the amount of damages which the Owner would sustain and said amount shall be retained from time to time by the Owner from current periodical estimates.

It is further agreed that time is of the essence of each and every portion of this contract and of the specifications wherein a definite and certain length of time is fixed for the performance of any act whatsoever; and where under the contract an additional time is

allowed for the completion of any work, the new time limit fixed by such extension shall be of the essence of this contract. Provided, that the Contractor shall not be charged with liquidated damages or any excess cost when the Owner determines that the Contractor is without fault and the Contractor's reasons for the time extension are acceptable to the Owner; Provided, further, that the Contractor shall not be charged with liquidated damages or any excess cost when the delay in completion of the work is due:

(a) To any preference, priority or allocation order duly issued by the Government;
(b) To unforeseeable cause beyond the control and without the fault or negligence of the Contractor, including, but not restricted to, acts of God, or of the public enemy, acts of the Owner, acts of another Contractor in the performance of a contract with the Owner, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and severe weather; and
(c) To any delays of Subcontractors or suppliers occasioned by any of the causes specified in subsections (a) and (b) of this article:

Provided, further, that the Contractor shall, within ten (10) days from the beginning of such delay, unless the Owner shall grant a further period of time prior to the date of final settlement of the contract, notify the Owner, in writing, of the causes of the delay, who shall ascertain the facts and extent of the delay and notify the Contractor within a reasonable time of its decision in the matter.

20. Correction of Work

All work, all materials, whether incorporated in the work or not, all processes of manufacture, and all methods of construction shall be at all times and places subject to the inspection of the Architect/Engineer who shall be the final judge of the quality and suitability of the work, materials, processes of manufacture, and methods of construction for the purposes for which they are used. Should they fail to meet his approval they shall be forthwith reconstructed, made good, replaced and/or corrected, as the case may be, by the Contractor at his own expense. Rejected material shall immediately be removed from the site. If, in the opinion of the Architect/Engineer, it is undesirable to replace any defective or damaged materials or to reconstruct or correct any portion of the work injured or not performed in accordance with the Contract Documents, the compensation to be paid to the Contractor hereunder shall be reduced by such amount as in the judgment of the Architect/Engineer shall be equitable.

21. Subsurface Conditions Found Different

Should the Contractor encounter sub-surface and/or latent conditions at the site materially differing from those shown on the Plans or indicated in the Specifications, he shall immediately give notice to the Architect/Engineer of such conditions before they are disturbed. The Architect/Engineer will thereupon promptly investigate the conditions, and if he finds that they materially differ from those shown on the Plans or indicated in the Specifications, he will at once make such changes in the Plans and/or Specifications as he may find necessary, any increase or decrease of cost resulting from such changes to be adjusted in the manner provided in Paragraph 17 of the General Conditions.

22. Claims for Extra Cost

No claim for extra work or cost shall be allowed unless the same was done in pursuance of a written order of the Architect/Engineer approved by the Owner, as aforesaid, and the claim presented with the first estimate after the changed or extra work is done. When work is performed under the terms of subparagraph 17(c) of the General Conditions, the Contractor shall furnish satisfactory bills, payrolls and vouchers covering all items of cost and when requested by the Owner, give the Owner access to accounts relating thereto.

23. Right of the Owner to Terminate Contract

In the event that any of the provisions of this contract are violated by the Contractor, or by any of his subcontractors, the Owner may serve written notice upon the Contractor and the Surety of its intention to terminate the contract, such notices to contain the reasons for

such intention to terminate the contract, and unless within ten (10) days after the serving of such notice upon the Contractor, such violation or delay shall cease and satisfactory arrangement of correction be made, the contract shall, upon the expiration of said ten (10) days, cease and terminate. In the event of any such termination, the Owner shall immediately serve notice thereof upon the Surety and the Contractor and the Owner shall have the right to take over and perform the contract to completion by contract or by force account for the account and at the expense of the Contractor and the Contractor and his Surety shall be liable to the Owner for any excess cost occasioned the Owner thereby, and in such event the Owner may take possession of and utilize in completing the work, such materials, appliances, and plant as may be on the site of the work and necessary therefor.

24. Construction Schedule and Periodic Estimates

Immediately after execution and delivery of the contract, and before the first partial payment is made, the Contractor shall deliver to the Owner an estimated construction progress schedule in form satisfactory to the Owner, showing the proposed dates of commencement and completion of each of the various subdivisions of work required under the Contract Documents and the anticipated amount of each monthly payment that will become due the Contractor in accordance with the progress schedule. The Contractor shall also furnish on forms to be supplied by the Owner (a) a detailed estimate giving a complete breakdown of the contract price and (b) periodic itemized estimates of work done for the purpose of making partial payments thereon. The costs employed in making up any of these schedules will be used only for determining the basis of partial payments and will not be considered as fixing a basis for additions to or deductions from the contract price.

25. Payments to Contractor

(a) Not later than the 15th day of each calendar month the Owner shall make a progress payment to the Contractor on the basis of a duly certified and approved estimate of the work performed during the preceding calendar month under this contract, but to insure the proper performance of this contract, the Owner shall retain ten percent (10%) of the amount of each estimate until final completion and acceptance of all work covered by this contract: Provided, that the Contractor shall submit his estimate not later than the first day of the month; Provided, further, that the Owner at any time after fifty percent (50%) of the work has been completed, if it finds that satisfactory progress is being made, may make any of the remaining progress payments in full; Provided, further, that on completion and acceptance of each separate building, public work, or other division of the contract, on which the price is stated separately in the contract, payment may be made in full, including retained percentages thereon, less authorized deductions.

(b) In preparing estimates the material delivered on the site and preparatory work done may be taken into consideration.

(c) All material and work covered by partial payments made shall thereupon become the sole property of the Owner, but this provision shall not be construed as relieving the Contractor from the sole responsibility for the care and protection of materials and work upon which payments have been made or the restoration of any damaged work, or as a waiver of the right of the Owner to require the fulfillment of all of the terms of the contract.

(d) Owner's Right to Withhold Certain Amounts and Make Application Thereof: The Contractor agrees that he will indemnify and save the Owner harmless from all claims growing out of the lawful demands of subcontractors, laborers, workmen, mechanics, materialmen, and furnishers of machinery and parts thereof, equipment, power tools, and all supplies, including commissary, incurred in the furtherance of the performance of this contract. The Contractor shall, at the Owner's request, furnish satisfactory evidence that all obligations of the nature hereinabove designated have been paid, discharged, or waived. If the Contractor fails so to do, then the Owner may, after having served written notice on the said Contractor, either pay unpaid bills, of which the Owner has written notice, direct, or withhold from the Contractor's unpaid compensation a sum of money deemed reasonably sufficient to pay any and all such lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged whereupon payment to the Contractor shall be resumed, in accordance with the terms of this

contract, but in no event shall the provisions of this sentence be construed to impose any obligations upon the Owner to either the Contractor or his Surety. In paying any unpaid bills of the Contractor, the Owner shall be deemed the agent of the Contractor, and any payment so made by the Owner shall be considered as a payment made under the contract by the Owner to the Contractor and the Owner shall not be liable to the Contractor for any such payments made in good faith.

26. Acceptance of Final Payment Constitutes Release

The acceptance by the Contractor of final payment shall be and shall operate as a release to the Owner of all claims and all liability to the Contractor for all things done or furnished in connection with this work and for every act and neglect of the Owner and others relating to or arising out of this work. No payment, however, final or otherwise, shall operate to release the Contractor or his sureties from any obligations under this contract or the Performance and Payment Bond.

27. Payments by Contractor

The Contractor shall pay (a) for all transportation and utility services not later than the 20th day of the calendar month following that in which services are rendered, (b) for all materials, tools, and other expendable equipment to the extent of ninety percent (90%) of the cost thereof, not later than the 20th day of the calendar month following that in which such materials, tools, and equipment are delivered at the site of the project, and the balance of the cost thereof, not later than the 30th day following the completion of that part of the work in or on which such materials, tools, and equipment are incorporated or used, and (c) to each of his subcontractors, not later than the 5th day following each payment to the Contractor, the respective amounts allowed the Contractor on account of the work performed by his subcontractors to the extent of each subcontractor's interest therein.

28. Insurance

The Contractor shall not commence work under this contract until he has obtained all the insurance required under this paragraph and such insurance has been approved by the Owner, nor shall the Contractor allow any subcontractor to commence work on his subcontract until the insurance required of the subcontractor has been so obtained and approved.

(a) Compensation Insurance: The Contractor shall procure and shall maintain during the life of this contract Workmen's Compensation Insurance as required by applicable State or territorial law for all of his employees to be engaged in work at the site of the project under this contract and, in case of any such work sublet, the Contractor shall require the subcontractor similarly to provide Workmen's Compensation Insurance for all of the latter's employees to be engaged in such work unless such employees are covered by the protection afforded by the Contractor's Workmen's Compensation Insurance. In case any class of employees engaged in hazardous work on the project under this contract is not protected under the Workmen's Compensation Statute, the Contractor shall provide and shall cause each subcontractor to provide adequate employer's liability insurance for the protection of such of his employees as are not otherwise protected.

* (b) Contractor's Public Liability and Property Damage Insurance and Vehicle Liability Insurance: The Contractor shall procure and shall maintain during the life of this contract Contractor's Public Liability Insurance, Contractor's Property Damage Insurance and Vehicle Liability Insurance in the amounts specified in the Supplemental General Conditions.

(c) Subcontractor's Public Liability and Property Damage Insurance and Vehicle Liability Insurance: The Contractor shall either (1) require each of his subcontractors to procure and to maintain during the life of his subcontract, Subcontractor's Public Liability and Property Damage Insurance and Vehicle Liability Insurance of the type and in the amounts specified in the Supplemental General Conditions specified in subparagraph (b) hereof or, (2) insure the activities of his policy, specified in subparagraph (b) hereof.

(d) Scope of Insurance and Special Hazards: The insurance required under subparagraphs (b) and (c) hereof shall provide adequate protection for the Contractor and his subcontractors, respectively, against damage claims which may arise from operations under

*See Supplemental General Conditions

this contract, whether such operations be by the insured or by anyone directly or indirectly employed by him and, also against any of the special hazards which may be encountered in the performance of this contract as enumerated in the Supplemental General Conditions.

(e) Builder's Risk Insurance (Fire and Extended Coverage): Until the project is completed and accepted by the Owner, the Contractor (as shown in Supplemental General Conditions) is required to maintain Builder's Risk Insurance (fire and extended coverage) on a 100 percent completed value basis on the insurable portion of the project for the benefit of the Owner, the Contractor, subcontractors as their interests may appear. The Contractor shall not include any costs for Builder's Risk Insurance (fire and extended coverage) premiums during construction unless the Contractor is required to provide such insurance; however, this provision shall not release the Contractor from his obligation to complete, according to plans and specifications, the project covered by the contract, and the Contractor and his Surety shall be obligated to full performance of the Contractor's undertaking.

(f) Proof of Carriage of Insurance: The Contractor shall furnish the Owner with certificates showing the type, amount, class of operations covered, effective dates and date of expiration of policies. Such certificates shall also contain substantially the following statement: "The insurance covered by this certificate will not be cancelled or materially altered, except after ten (10) days written notice has been received by the Owner."

29. Contract Security

The Contractor shall furnish a performance bond in an amount at least equal to one hundred percent (100%) of the contract prices as security for the faithful performance of this contract and also a payment bond in an amount not less than one hundred percent (100%) of the contract price or in a penal sum not less than that prescribed by State, territorial or local law, as security for the payment of all persons performing labor on the project under this contract and furnishing materials in connection with this contract. The performance bond and the payment bond may be in one or in separate instruments in accordance with local law.

30. Additional or Substitute Bond

If at any time the Owner for justifiable cause shall be or become dissatisfied with any surety or sureties, then upon the Performance or Payment Bonds, the Contractor shall within five (5) days after notice from the Owner so to do, substitute an acceptable bond (or bonds) in such form and sum and signed by such other surety or sureties as may be satisfactory to the Owner. The premiums on such bond shall be paid by the Contractor. No further payments shall be deemed due nor shall be made until the new surety or sureties shall have furnished such an acceptable bond to the Owner.

31. Assignments

The Contractor shall not assign the whole or any part of this contract or any moneys due or to become due hereunder without written consent of the Owner. In case the Contractor assigns all or any part of any moneys due or to become due under this contract, the instrument of assignment shall contain a clause substantially to the effect that it is agreed that the right of the assignee in and to any moneys due or to become due to the Contractor shall be subject to prior claims of all persons, firms and corporations of services rendered or materials supplied for the performance of the work called for in this contract.

32. Mutual Responsibility of Contractors

If, through acts of neglect on the part of the Contractor, any other Contractor or any subcontractor shall suffer loss or damage on the work, the Contractor agrees to settle with such other Contractor or subcontractor by agreement or arbitration if such other Contractor or subcontractors will so settle. If such other Contractor or subcontractor shall assert any claim against the Owner on account of any damage alleged to have been sustained, the Owner shall notify the Contractor, who shall indemnify and save harmless the Owner against any such claim.

33. Separate Contract

The Contractor shall coordinate his operations with those of other Contractors. Cooperation will be required in the arrangement for the storage of materials and in the detailed execution of the work. The Contractor, including his subcontractors, shall keep informed of the progress and the detail work of other Contractors and shall notify the Architect/Engineer immediately of lack of progress or defective workmanship on the part of other Contractors. Failure of a contractor to keep informed of the work progressing on the site and failure to give notice of lack of progress or defective workmanship by others shall be construed as acceptance by him of the status of the work as being satisfactory for proper coordination with his own work.

34. Subcontracting

(a) The Contractor may utilize the services of specialty subcontractors on those parts of the work which, under normal contracting practices, are performed by specialty subcontractors.

(b) The Contractor shall not award any work to any subcontractor without prior written approval of the Owner, which approval will not be given until the Contractor submits to the Owner a written statement concerning the proposed award to the subcontractor, which statement shall contain such information as the Owner may require.

(c) The Contractor shall be as fully responsible to the Owner for the acts and omissions of his subcontractors, and of persons either directly or indirectly employed by them, as he is for the acts and omissions of persons directly employed by him.

(d) The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the work to bind subcontractors to the Contractor by the terms of the General Conditions and other contract documents insofar as applicable to the work of subcontractors and to give the Contractor the same power as regards terminating any subcontract that the Owner may exercise over the Contractor under any provision of the contract documents.

(e) Nothing contained in this contract shall create any contractual relation between any subcontractor and the Owner.

35. Architect/Engineer's Authority

The Architect/Engineer shall give all orders and directions contemplated under this contract and specifications, relative to the execution of the work. The Architect/Engineer shall determine the amount, quality, acceptability, and fitness of the several kinds of work and materials which are to be paid for under this contract and shall decide all questions which may arise in relation to said work and the construction thereof. The Architect/Engineer's estimates and decisions shall be final and conclusive, except as herein otherwise expressly provided. In case any question shall arise between the parties hereto relative to said contract or specifications, the determination or decision of the Architect/Engineer shall be a condition precedent to the right of the Contractor to receive any money or payment for work under this contract affected in any manner or to any extent by such question.

The Architect/Engineer shall decide the meaning and intent of any portion of the specifications and of any plans or drawings where the same may be found obscure or be in dispute. Any differences or conflicts in regard to their work which may arise between the Contractor under this contract and other Contractors performing work for the Owner shall be adjusted and determined by the Architect/Engineer.

36. Stated Allowances

The Contractor shall include in his proposal the cash allowances stated in the Supplemental General Conditions. The Contractor shall purchase the "Allowed Materials" as directed by the Owner on the basis of the lowest and best bid of at least three competitive bids. If the actual price for purchasing the "Allowed Materials" is more or less than the "Cash Allowance," the contract price shall be adjusted accordingly. The adjustment in contract price shall be made on the basis of the purchase price without additional charges for overhead, profit, insurance or any other incidental expenses. The cost of installation of the "Allowed Materials" shall be included in the applicable sections of the Contract Specifications covering this work.

37. Use of Premises and Removal of Debris

The Contract expressly undertakes at his own expense:

(a) to take every precaution against injuries to persons or damage to property;
(b) to store his apparatus, materials, supplies and equipment in such orderly fashion at the site of the work as will not unduly interfere with the progress of his work or the work of any other contractors;
(c) to place upon the work or any part thereof only such loads as are consistent with the safety of that portion of the work;
(d) to clean up frequently all refuse, rubbish, scrap materials, and debris caused by his operations, to the end that at all times the site of the work shall present a neat, orderly and workmanlike appearance;
(e) before final payment to remove all surplus material, false-work, temporary structures, including foundations thereof, plant of any description and debris of every nature resulting from his operations, and to put the site in a neat, orderly condition;
(f) to effect all cutting, fitting or patching of his work required to make the same to conform to the plans and specifications and, except with the consent of the Architect/Engineer, not to cut or otherwise alter the work of any other Contractor.

38. Quantities of Estimate

Wherever the estimated quantities of work to be done and materials to be furnished under this contract are shown in any of the documents including the proposal, they are given for use in comparing bids and the right is especially reserved except as herein otherwise specifically limited, to increase or diminish them as may be deemed reasonably necessary or desirable by the Owner to complete the work contemplated by this contract, and such increase or diminution shall in no way vitiate this contract, nor shall any such increase or diminution give cause for claims or liability for damages.

39. Lands and Rights-of-Way

Prior to the start of construction, the Owner shall obtain all lands and rights-of-way necessary for the carrying out and completion of work to be performed under this contract.

40. General Guaranty

Neither the final certificate of payment nor any provision in the Contract Documents, nor partial or entire occupancy of the premises by the Owner, shall constitute an acceptance of work not done in accordance with the Contract Documents or relieve the Contractor of liability in respect to any express warranties or responsibility for faulty materials or workmanship. The Contractor shall remedy any defects in the work and pay for any damage to other work resulting therefrom, which shall appear within a period of one year from the date of final acceptance of the work unless a longer period is specified. The Owner will give notice of observed defects with reasonable promptness.

41. Conflicting Conditions

Any provisions in any of the Contract Documents which may be in conflict or inconsistent with any of the paragraphs in these General Conditions shall be void to the extent of such conflict or inconsistency.

42. Notice and Service Thereof

Any notice to any Contractor from the Owner relative to any part of this contract shall be in writing and considered delivered and the service thereof completed, when said notice is posted, by certified or registered mail, to the said Contractor at his last given address, or delivered in person to the said Contractor or his authorized representative on the work.

43. Provisions Required by Law Deemed Inserted

Each and every provision of law and clause required by law to be inserted in this contract shall be deemed to be inserted herein and the contract shall be read and enforced as though it were included herein, and if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either party the contract shall forthwith be physically amended to make such insertion or correction.

44. Protection of Lives and Health

In order to protect the lives and health of his employees under the contract, the Contractor shall comply with all pertinent provisions of the "Manual of Accident Prevention in Construction" issued by the Associated General Contractors of America, Inc., and shall maintain an accurate record of all cases of death, occupational disease, and injury requiring medical attention or causing loss of time from work, arising out of and in the course of employment on work under the contract. He alone shall be responsible for the safety, efficiency, and adequacy of his plant, appliances, and methods, and for any damage which may result from their failure or their improper construction, maintenance, or operation.

45. Subcontracts

The Contractor will insert in any subcontracts the sections 50 through 68a contained herein and such other clauses as the Department of Housing and Urban Development may, by instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts which they may enter into, together with a clause requiring this insertion in any further subcontracts that may in turn be made.

46. Equal Employment Opportunity

During the performance of this contract the Contractor agrees as follows:

(1) The Contractor will not discriminate against any employee or applicant for employment because of race, creed, color, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, creed, color, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

(2) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, creed, color, or national origin.

(3) The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the labor union or workers' representative of the Contractor's commitments under Section 202 of Executive Order No. 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(4) The Contractor will comply with all provisions of Executive Order No. 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(5) The Contractor will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the Department of Housing and Urban Development and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(6) In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be cancelled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts or Federally-assisted construction

contracts, in accordance with procedures authorized in Executive Order No. 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(7) The Contractor will include the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the Department of Housing and Urban Development may direct as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, that in the event the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the Department of Housing and Urban Development, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

47. Interest of Member of or Delegate to Congress

No member of or Delegate to Congress, or Resident Commissioner, shall be admitted to any share or part of this contract or to any benefit that may arise therefrom, but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.

48. Other Prohibited Interests

No official of the Owner who is authorized in such capacity and on behalf of the Owner to negotiate, make, accept or approve, or to take part in negotiating, making, accepting, or approving any architectural, engineering, inspection, construction or material supply contract or any subcontract in connection with the construction of the project, shall become directly or indirectly interested personally in this contract or in any part hereof. No officer, employee, architect, attorney, engineer or inspector of or for the Owner who is authorized in such capacity and on behalf of the Owner to exercise any legislative, executive, supervisory or other similar functions in connection with the construction of the project, shall become directly or indirectly interested personally in this contract or in any part thereof, any material supply contract, subcontract, insurance contract, or any other contract pertaining to the project.

49. Use and Occupancy Prior to Acceptance by Owner

The Contractor agrees to the use and occupancy of a portion or unit of the project before formal acceptance by the Owner, provided the Owner:

(a) Secures written consent of the Contractor except in the event, in the opinion of the Architect/Engineer, the Contractor is chargeable with unwarranted delay in final cleanup of punch list items or other contract requirements.

(b) Secures endorsement from the insurance-carrier and consent of the surety permitting occupancy of the building or use of the project during the remaining period of construction, or,

(c) When the project consists of more than one building, and one of the buildings is occupied, secures permanent fire and extended coverage insurance, including a permit to complete construction. Consent of the surety must also be obtained.

50. Federal Labor Standards Provisions (Applicability)

The Project or Program to which the work covered by this Contract pertains is being assisted by the United States of America and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such Federal assistance.

51. Minimum Wage Rates for Laborers and Mechanics

All laborers and mechanics employed upon the work covered by this Contract shall be paid unconditionally and not less often than once each week, and without subsequent deduction or rebate on any account (except such payroll deductions as are made mandatory by law and such other payroll deductions as are permitted by the applicable regulations issued by the Secretary of Labor, United States Department of Labor, pursuant to the Anti-Kickback Act hereinafter identified) the full amount due at time of payment computed at wage rates not less than those contained in the wage determination decision of said Secretary of Labor (a copy of which is attached and herein incorporated by reference), regardless of any contractual relationship which may be alleged to exist between the Contractor or any subcontractor and such laborers and mechanics. All laborers and mechanics employed upon such work shall be paid in cash, except that payment may be by check if the employer provides or secures satisfactory facilities approved by the Local Public Agency or Public Body for the cashing of the same without cost or expense to the employee. For the purpose of this clause, contributions made or costs reasonably anticipated under Section 1 (b) (2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of Section 5.5(a)(1)(iv) of Title 29, Code of Federal Regulations. Also for the purpose of this clause, regular contributions made or costs incurred for more than a weekly period, are deemed to be constructively made or incurred during such weekly period.

52. Underpayments of Wages or Salaries

In case of underpayment of wages by the Contractor or by any subcontractor to laborers or mechanics employed by the Contractor or subcontractor upon the work covered by this Contract, the Local Public Agency or Public Body in addition to such other rights as may be afforded it under this Contract shall withhold from the Contractor, out of any payments due the Contractor, so much thereof as the Local Public Agency or Public Body may consider necessary to pay such laborers or mechanics the full amount of wages required by this Contract. The amount so withheld may be disbursed by the Local Public Agency or Public Body, for and on account of the Contractor or the subcontractor (as may be appropriate), to the respective laborers or mechanics to whom the same is due or on their behalf to plans, funds, or programs for any type of fringe benefit prescribed in the applicable wage determination.

53. Anticipated Costs of Fringe Benefits

If the Contractor does not make payments to a trustee or other third person, he may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing fringe benefits under a plan or program of a type expressly listed in the wage determination decision of the Secretary of Labor which is a part of this Contract: Provided, however, The Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program. A copy of any findings made by the Secretary of Labor in respect to fringe benefits being provided by the Contractor must be submitted to the Local Public Agency or Public Body with the first payroll filed by the Contractor subsequent to receipt of the findings.

54. Overtime Compensation Required by Contract Work Hours and Safety Standards Act (76 Stat. 357-360: Title 40 U.S.C., Sections 327-332)

(a) Overtime requirements: No contractor or subcontractor contracting for any part of the Contract work which may require or involve the employment of laborers or mechanics, including watchmen and guards, shall require or permit any laborer or mechanic in any workweek in which he is employed on such work to work in excess of 8 hours in any calendar day or in excess of 40 hours in such work week unless such laborer or mechanic receives compensation at a rate not less than one and one-half times his basic rate of pay for all hours worked in excess of 8 hours in any calendar day or in excess of 40 hours in such work week, as the case may be.

(b) Violation: liability for unpaid wages liquidated damages. In the event of any violation of the clause set forth in paragraph (a), the Contractor and any subcontractor responsible therefor shall be liable to any affected employee for his unpaid wages. In addition, such Contractor and subcontractor shall be liable to the United States for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic employed in violations of the clause set forth in paragraph (a), in the sum of $10 for each calendar day on which such employee was required or permitted to work in excess of 8 hours or in excess of the standard workweek of 40 hours without payment of the overtime wages required by the clause set forth in paragraph (a).

(c) Withholding for liquidated damages. The Local Public Agency or Public Body shall withhold or cause to be withheld, from any moneys payable on account of work performed by the Contractor or subcontractor, such sums as may administratively be determined to be necessary to satisfy any liabilities of such Contractor or subcontractor for liquidated damages as provided in the clause set forth in paragraph (b).

(d) Subcontracts. The Contractor shall insert in any subcontracts the clauses set forth in paragraphs (a), (b), and (c) of this Section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts which they may enter into, together with a clause requiring this insertion in any further subcontracts that may in turn be made.

55. Employment of Apprentices/Trainees

(a) Apprentices will be permitted to work as such only when they are registered, individually, under a bona fide apprenticeship program registered with a State apprenticeship agency which is recognized by the Bureau of Apprenticeship and Training, U.S. Department of Labor; or, if no such recognized agency exists in a State, under a program registered with the Bureau of Apprenticeship and Training, U.S. Department of Labor. The allowable ratio of apprentices to journeymen in any craft classification shall not be greater than the ratio permitted to the Contractor as to his entire work force under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not a trainee as defined in subsection (b) immediately following or is not registered as above, shall be paid the wage rate determined by the Secretary of Labor for the classification of work he actually performed. The Contractor or Subcontractor will be required to furnish to the Local Public Agency or Public Body written evidence of the registration of his program and apprentices as well as of the appropriate ratios and wage rates, for the area of construction prior to using any apprentices on the contract work.

(b) Trainees will be permitted to work as such when they are bona fide trainees employed pursuant to a program approved by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training, and where subsection (c) immediately following is applicable, in accordance with the provisions of 29 CFR 5a.

(c) On contracts in excess of $10,000 the employment of all laborers and mechanics, including apprentices and trainees, as defined in 29 CFR Part 5.2(c) shall also be subject to the provisions of 6(d) of this section.

(d) The Contractor agrees that:

(1) He will make a diligent effort to hire for the performance of the contract a number of apprentices or trainees, or both, in each occupation, which bears to the average number of journeymen in that occupation to be employed in the performance of the contract the applicable ratio as determined by the Secretary of Labor;

(2) He will assure that 25 percent of such apprentices or trainees in such occupation are in their first year of training, where feasible. Feasibility here involves a consideration of (a) the availability of training opportunities for first year apprentices, (b) the hazardous nature of the work for beginning workers, (c) excessive unemployment of apprentices in their second and subsequent years of training;

(3) During the performance of the contract he will, to the greatest extent possible, employ the number of apprentices or trainees necessary to meet currently the requirements of (1) and (2) immediately preceding;

(4) He will maintain records of employment by trade of the number of apprentices and trainees, apprentices and trainees by first year of training, and of journeymen, and the wages paid and hours of work of such apprentices, trainees and journeymen; and he will make these records available for inspection upon request of the Department of Labor and the agency;

(5) If he claims compliance based on the criterion stated in 29 CFR 5a.4(b), he will maintain records of employment, as described in the immediately preceding paragraph, on non-Federal and nonfederally assisted construction work done during the performance of the contract in the same labor market area; and he will make these records available for inspection upon request of the Department of Labor and the agency;

(6) He will supply one copy of the written notices required in accordance with 29 CFR 5a.4(c) at the request of Government compliance officers, and will supply at 3-month intervals during the performance of the contract and after completion of contract performance a statement describing steps taken toward making a diligent effort and containing a breakdown by craft, of hours worked and wages paid for first year apprentices and trainees, other apprentices and trainees, and journeymen. One copy of the statement will be sent to the agency and one to the Secretary of Labor.

56. Employment of Certain Persons Prohibited

No person under the age of sixteen years and no person who, at the time, is serving sentence in a penal or correctional institution shall be employed on the work covered by this Contract.

57. Regulations Pursuant to So-Called "Anti-Kickback Act"

The Contractor shall comply with the applicable regulations (a copy of which is attached and herein incorporated by reference) of the Secretary of Labor, United States Department of Labor, made pursuant to the so-called "Anti-Kickback Act" of June 13, 1934 (48 Stat. 948; 62 Stat. 862; Title U.S.C., Section 874; and Title 40 U.S.C., Section 276c), and any amendments or modifications thereof, shall cause appropriate provisions to be inserted in subcontracts to insure compliance therewith by all subcontractors subject thereto, and shall be responsible for the submission of affidavits required by subcontractors thereunder, except as said Secretary of Labor may specifically provide for reasonable limitations, variations, tolerances, and exemptions from the requirements thereof.

58. Employment of Laborers or Mechanics not Listed in Aforesaid Wage Determination Decision

Any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the Contract will be classified or reclassified conformably to the wage determination by the Local Public Agency or Public Body, and a report of the action taken shall be submitted by the Local Public Agency or Public Body, through the Secretary of Housing and Urban Development, to the Secretary of Labor, United States Department of Labor. In the event the interested parties cannot agree on the proper classification or reclassification of a particular class of laborers and mechanics to be used, the question accompanied by the recommendation of the Local Public Agency or Public Body shall be referred, through the Secretary of Housing and Urban Development, to the Secretary of Labor for final determination.

59. Fringe Benefits not Expressed as Hourly Wage Rates

The Local Public Agency or Public Body shall require, whenever the minimum wage rate prescribed in the Contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly wage rate and the Contractor is obligated to pay cash equivalent of such a fringe benefit, an hourly cash equivalent thereof to be established. In the event the interested parties cannot agree upon a cash equivalent of the fringe benefit, the question, accompanied by the recommendation of the Local Public Agency or Public Body, shall be referred, through the Secretary of Housing and Urban Development, to the Secretary of Labor for determination.

60. Posting Wage Determination Decisions and Authorized Wage Deductions

The applicable wage poster of the Secretary of Labor, United States Department of Labor, and the applicable wage determination decisions of said Secretary of Labor with respect to the various classification of laborers and mechanics employed and to be employed upon the work covered by this Contract, and a statement showing all deductions, if any, in accordance with the provisions of this Contract, to be made from wages actually earned by persons so employed or to be employed in such classifications, shall be posted at appropriate conspicuous points at the site of the work.

61. Complaints, Proceedings, or Testimony by Employees

No laborer or mechanic to whom the wage, salary, or other labor standards provisions of this Contract are applicable shall be discharged or in any other manner discriminated against by the Contractor or any subcontractor because such employee has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable under this Contract to his employer.

62. Claims and Disputes Pertaining to Wage Rates

Claims and disputes pertaining to wage rates or to classifications of laborers and mechanics employed upon the work covered by this Contract shall be promptly reported by the Contractor in writing to the Local Public Agency or Public Body for referral by the latter through the Secretary of Housing and Urban Development to the Secretary of Labor, United States Department of Labor, whose decision shall be final with respect thereto.

63. Questions Concerning Certain Federal Statutes and Regulations

All questions arising under this Contract which relate to the application or interpretation of (a) the aforesaid Anti-Kickback Act, (b) the Contract Work Hours and Safety Standards Act, (c) the aforesaid Davis-Bacon Act, (d) the regulations issued by the Secretary of Labor, United States Department of Labor, pursuant to said Acts, or (e) the labor standards provisions of any other pertinent Federal statute, shall be referred, through the Local Public Agency or Public Body and the Secretary of Housing and Urban Development, to the Secretary of Labor, United States Department of Labor, for said Secretary's appropriate ruling or interpretation which shall be authoritative and may be relied upon for the purposes of this Contract.

64. Payrolls and Basic Payroll Records of Contractor and Subcontractor

The Contractor and each subcontractor shall prepare his payrolls on forms satisfactory to and in accordance with instructions to be furnished by the Local Public Agency or Public Body. The Contractor shall submit weekly to the Local Public Agency or Public Body two certified copies of all payrolls of the Contractor and of the subcontractors, it being understood that the Contractor shall be responsible for the submission of copies of payrolls of all subcontractors. Each such payroll shall contain the "Weekly Statement of Complaince" set forth in Section 3.3. of Title 29, Code of Federal Regulations. The payrolls and basic payroll records of the Contractor and each subcontractor covering all laborers and mechanics employed upon the work covered by this Contract shall be maintained during the course of the work and preserved for a period of 3 years thereafter. Such payrolls and basic payroll records shall contain the name and address of each such employee, his correct classification, rate of pay (including rates of contributions or costs anticipated of the types described in Section 1(b)(2) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made, and actual wages paid. In addition, whenever the Secretary of Labor has found under Section 5.5(a)(1)(iv) of Title 29, Code of Federal Regulations, that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis-Bacon Act, the Contractor or subcontractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. The Contractor and each subcontractor shall make his employment records with respect to persons employed by him upon the work covered by this Contract available for inspection by authorized representatives of the Secretary of Housing and Urban Development, the Local Public Agency or Public Body, and the United States Department of Labor. Such representatives shall be permitted to interview employees of the Contractor or of any subcontractor during working hours on the job.

65. Specific Coverage of Certain Types of Work by Employees

The transporting of materials and supplies to or from the site of the Project or Program to which this Contract pertains by the employees of the Contractor or of any subcontractor, and the manufacturing or furnishing of materials, articles, supplies, or equipment on the site of the Project or Program to which this Contract pertains by persons employed by the Contractor or by any subcontractor, shall, for the purposes of this Contract, and without limiting the generality of the foregoing provisions of this Contract, be deemed to be work to which these Federal Labor Standards Provisions are applicable.

66. Ineligible Subcontractors

The Contractor shall not subcontract any part of the work covered by this Contract or permit subcontracted work to be further subcontracted without the Local Public Agency's or Public Body's prior written approval of the subcontractor. The Local Public Agency or Public Body will not approve any subcontractor for work covered by this Contract who is at the time ineligible under the provisions of any applicable regulations issued by the Secretary of Labor, United States Department of Labor or the Secretary of Housing and Urban Development, to receive an award of such subcontract.

67. Provisions to be Included in Certain Subcontracts

The Contractor shall include or cause to be included in each subcontract covering any of the work covered by this Contract, provisions which are consistent with these Federal Labor Standards Provisions and also a clause requiring the subcontractors to include such provisions in any lower tier subcontracts which they may enter into, together with a clause requiring such insertion in any further subcontracts that may in turn be made.

68. Breach of Foregoing Federal Labor Standards Provisions

In addition to the causes for termination of this Contract as herein elsewhere set forth, the Local Public Agency or Public Body reserves the right to terminate this Contract if the Contractor or any subcontractor whose subcontract covers any of the work covered by this Contract shall breach any of these Federal Labor Standards Provisions. A breach of these Federal Labor Standards Provisions may also be grounds for debarment as provided by the applicable regulations issued by the Secretary of Labor, United States Department of Labor.

68. (a) Attachment

ATTACHMENT TO FEDERAL LABOR STANDARDS PROVISIONS

SO-CALLED "ANTI-KICKBACK ACT" AND REGULATIONS PROMULGATED PURSUANT THERETO BY THE SECRETARY OF LABOR, UNITED STATES DEPARTMENT OF LABOR

TITLE 18, U.S.C., section 874

(Replaces section 1 of the Act of June 13, 1934 (48 Stat. 948, 40 U.S.C., sec. 276b) pursuant to the Act of June 25, 1948, 62 Stat. 862)

KICKBACKS FROM PUBLIC WORKS EMPLOYEES

Whoever, by force, intimidation, or threat of procuring dismissal from employment, or by any other manner whatsoever induces any person employed in the construction, prosecution, completion or repair of any public building, public work, or building or work financed in whole or in part by loans or grants from the United States, to give up any part of the compensation to which he is entitled under his contract of employment, shall be fined not more than $5,000 or imprisoned not more than five years, or both.

SECTION 2 OF THE ACT OF JUNE 13, 1934, AS AMENDED (48 Stat. 948, 62 Stat. 862, 63 Stat. 108, 72 Stat. 967, 40 U.S.C., sec. 276c)

The Secretary of Labor shall make reasonable regulations for contractors and subcontractors engaged in the construction, prosecution, completion or repair of public buildings, public works or buildings or works financed in whole or in part by loans or grants from the United States, including a provision that each contractor and subcontractor shall furnish weekly a statement with respect to the wages paid each employee during the preceding week. Section 1001 of Title 18 (United States Code) shall apply to such statements.

--- X X X ---

Pursuant to the aforesaid Anti-Kickback Act, the Secretary of Labor, United States Department of Labor, has promulgated the regulations hereinafter set forth, which regulations are found in Title 29, Subtitle A, Code of Federal Regulations, Part3. The term "this part," as used in the regulations hereinafter set forth, refers to Part 3 last above mentioned. Said regulations as follows:

TITLE 29 - LABOR

Subtitle A - Office of the Secretary of Labor

PART 3-CONTRACTORS AND SUBCONTRACTORS ON PUBLIC BUILDING OR PUBLIC WORK FINANCED IN WHOLE OR IN PART BY LOANS OR GRANTS FROM THE UNITED STATES

Section 3.1 Purpose and scope.

This part prescribes "anti-kickback" regulations under section 2 of the Act of June 13, 1934, as amended (40 U.S.C., 276c), popularly known as the Copeland Act. This part applies to any contract which is subject to Federal wage standards and which is for the construction, prosecution, completion, or repair of public buildings, public works or buildings or works financed in whole or in part by loans or grants from the United States. The part is intended to aid in the enforcement of the minimum wage provisions of the Davis-Bacon Act and the various statutes dealing with Federally-assisted construction that contain similar minimum wage provisions, including those provisions which are not subject to Reorganization Plan No. 14 (e.g., the College Housing Act of 1950, the Federal Water Pollution Control Act, and the Housing Act of 1959), and in the enforcement of the overtime provisions of the Contract Work Hours Standards Act whenever they are applicable to construction work. The part details the obligation of contractors and subcontractors relative to the weekly submission of statements regarding the wages paid on work covered thereby; sets forth the circumstances and procedures governing the making of payroll deductions from the wages of those employed on such work; and delineates the methods of payment permissible on such work.

Section 3.2 Definitions.

As used in the regulations in this part:
(a) The terms "building" or "work" generally include construction activity as distinguished from manufacturing, furnishing of materials, or servicing and maintenance work. The terms include, without limitation, buildings, structures, and improvements of all types, such as bridges, dams, plants, highways, parkways, streets, subways, tunnels, sewers, mains, power-lines, pumping stations, railways, airports, terminals, docks, piers, wharves, ways, lighthouses, buoys, jettics, breakwaters, levees, and canals; dredging, shoring, scaffolding, drilling, blasting, excavating, clearing, and landscaping. Unless conducted in connection with and at the site of such a building or work as is described in the foregoing sentence, the manufacture or furnishing of materials, articles, supplies, or equipment (whether or not a Federal or State agency acquires title to such materials, articles, supplies, or equipment during the course of the manufacture or furnishing, or owns the materials from which they are manufactured or furnished) is not a "building" or "work" within the meaning of the regulations in this part.

(b) The terms "construction," "prosecution," "completion," or "repair" mean all types of work done on a particular building or work at the site thereof, including, without limitation, altering, remodeling, painting and decorating, the transporting of materials and supplies to or from the building or work by the employees of the construction contractor or construction subcontractor, and the manufacturing or furnishing of materials, articles, supplies, or equipment on the site of the building or work, by persons employed at the site by the contractor or subcontractor.

(c) The terms "public building" or "public work" include building or work for whose construction, prosecution, completion, or repair, as defined above, a Federal agency is a contracting party, regardless of whether title thereof is in a Federal agency.

(d) The term "building or work financed in whole or in part by loans or grants from the United States" includes building or work for whose construction, prosecution, completion, or repair, as defined above, payment or part payment is made directly or indirectly from funds provided by loans or grants by a Federal agency. The term does not include building or work for which Federal assistance is limited solely to loan guarantees or insurance.

(e) Every person paid by a contractor or subcontractor in any matter for his labor in the construction, prosecution, completion, or repair of a public building or public work or building or work financed in whole or in part by loans or grants from the United States is "employed" and receiving "wages," regardless of any contractual relationship alleged to exist between him and the real employer.

(f) The term "any affiliated person" includes a spouse, child, parent, or other close relative of the contractor or subcontractor, a partner or officer of the contractor or subcontractor; a corporation closely connected with the contractor or subcontractor as parent, subsidiary or otherwise, and an officer or agent of such corporation.

(g) The term "Federal agency" means the United States, the District of Columbia, and all executive departments, indenpendent establishments, administrative agencies, and instrumentalities of the United States and of the District of Columbia, including corporations, all or substantially all of the stock of which is beneficially owned by the United States, by the District of Columbia, or any of the foregoing departments, establishments, agencies, and instrumentalities.

Section 3.3 Weekly statement with respect to payment of wages.

(a) As used in this section, the term "employee" shall not apply to persons in classifications higher than that of Laborer or mechanic and those who are the immediate supervisors of such employees.

(b) Each contractor or subcontractor engaged in the construction, prosecution, completion, or repair of any public building or public work, or building or work financed in whole or in part by loans or grants from the United States, shall furnish each week a statement with respect to the wages paid each of its employees engaged on work covered by 29 CFR Parts 3 and 5 during the preceding weekly payroll period. This statement shall be executed by the contractor or subcontractor or by an authorized officer or employee of the contractor or subcontractor who supervises the payment of wages, and shall be on form WH 318, "Statement of Compliance", or on an

identical form on the back of WH 317, "Payroll (For Contractors Optional Use)" or on any form with identical wording. Sample copies of WH 317 and WH 318 may be obtained from the Government contracting or sponsoring agency, and copies of these forms may be purchased at the Government Printing Office.

(c) The requirements of this section shall not apply to any contract of $2,000 or less.

(d) Upon a written finding by the head of a Federal agency, the Secretary of Labor may provide reasonable limitations, variations, tolerances, and exemptions from the requirements of this section subject to such conditions as the Secretary of Labor may specify.

(29 F.R. 95, Jan. 4, 1964, as amended at 33 F.R. 10186, July 17, 1968)

Section 3.4 Submission of weekly statements and the preservation an and inspection of weekly payroll records.

(a) Each weekly statement required under 3.3 shall be delivered by the contractor or subcontractor, within seven days after the regular payment date of the payroll period, to a representative of a Federal or State agency in charge at the site of the building or work, or, if there is no representative of a Federal or State agency at the site of the building or work, the statement shall be mailed by the contractor or subcontractor, within such time, to a Federal or State agency contracting for or financing the building or work. After such examination and check as may be made, such statement, or a copy thereof, shall be kept available, or shall be transmitted together with a report of any violation, in accordance with applicable procedures prescribed by the United States Department of Labor.

(b) Each contractor or subcontractor shall preserve his weekly payroll records for a period of three years from date of completion of the contract. The payroll records shall set out accurately and completely the name and address of each laborer and mechanic, his correct classification, rate of pay, daily and weekly number of hours worked, deductions made, and actual wages paid. Such payroll records shall be made available at all times for inspection by the contracting officer or his authorized representative, and by authorized representatives of the Department of Labor.

Section 3.5 Payroll deductions permissible without application to or approval of the Secretary of Labor.

Deductions made under the circumstances or in the situations described in the paragraphs of this section may be made without application to and approval of the Secretary of Labor:

(a) Any deduction made in compliance with the requirements of Federal, State, or local law, such as Federal or State withholding income taxes and Federal social security taxes.

(b) Any deduction of sums previously paid to the employee as a bona fide prepayment of wages when such prepayment is made without discount or interest. A "bona fide prepayment of wages" is considered to have been made only when cash or its equivalent has been advanced to the person employed in such manner as to give him complete freedom of disposition of the advanced funds.

(c) Any deduction of amounts required by court process to be paid to another, unless the deduction is in favor of the contractor, subcontractor or any affiliated person, or when collusion or collaboration exists.

(d) Any deduction constituting a contribution on behalf of the person employed to funds established by the employer or representatives of employees, or both, for the purpose of providing either from principal or income, or both, medical or hospital care, pensions or annuities on retirement, death benefits, compensation for injuries, illness, accidents, sickness, or disability, or for insurance to provide any of the foregoing, or unemployment benefits, vacation pay, savings accounts, or similar payments for the benefit of employees, their families and dependents: Provided, however, That the following standards are met: (1) The deduction is not otherwise prohibited by law; (2) it is either: (i) Voluntarily consented to by the employee in writing and in advance of the period in which the work is to be done and such consent is not a condition either for the obtaining of or for the continuation of employment, or (ii) provided for in a bona fide collective bargaining agreement between the contractor or subcontractor and representatives of its employees; (3) to profit or other benefit is otherwise obtained, directly or indirectly, by the contractor or subcontractor or any affiliated person in the form of commission, dividend, or otherwise; and (1) the (1) the deductions shall serve the convenience and interest of the employer.

(e) Any deduction contributing toward the purchase of United States Defense Stamps and Bonds when voluntarily authorized by the employee.

(f) Any deduction requested by the employee to enable him to repay loans to or to purchase shares in credit unions organized and operated in accordance with Federal and State credit union statutes.

(g) Any deduction voluntarily authorized by the employee for the making of contributions to governmental or quasi-governmental agencies, such as the American Red Cross.

(h) Any deduction voluntarily authorized by the employee for the making of contributions to Community Chests, United Givers Funds, and similar charitable organizations.

(i) Any deductions to pay regular union initiation fees and membership dues, not including fines or special assessments: Provided, however, That a collective bargaining agreement between the contractor or subcontractor and representatives of its employees provides for such deductions and the deductions are not otherwise prohibited by law.

(j) Any deduction not more than for the "reasonable cost" of board, lodging, or other facilities meeting the requirements of section 3(m) of the Fair Labor Standards Act of 1938, as amended, and Part 531 of this title. When such a deduction is made the additional records required under 516.27(a) of this title shall be kept.

Section 3.6 Payroll deductions permissible with the approval of the Secretary of Labor.

Any contractor or subcontractor may apply to the Secretary of Labor for permission to make any deduction not permitted under 3.5. The Secretary may grant permission whenever he finds that:

(a) The contractor, subcontractor, or any affiliated person does not make a profit or benefit directly or indirectly from the deduction either in the form of a commission, dividend, or otherwise;

(b) The deduction is not otherwise prohibited by law;

(c) The deduction is either (1) voluntarily consented to be the employee in writing and in advance of the period in which the work is to be done and such consent is not a condition either for the obtaining of employment or its continuance, or (2) provided for in a bona fide collective bargaining agreement between the contractor or subcontractor and representatives of its employees; and

(d) The deduction serves the convenience and interest of the employee.

Section 3.7 Applications for the approval of the Secretary of Labor.

Any application for the making of payroll deductions under 3.6 shall comply with the requirements prescribed in the following paragraphs of this section:

(a) The application shall be in writing and shall be addressed to the Secretary of Labor.

(b) The application shall identify the contractor contracts under which the work in question is to be performed. Permission will be given for deductions only on specific, identified contracts, except upon a showing of exceptional circumstances.

(c) The application shall state affirmatively that there is compliance with the standards set forth in the provisions of 3.6. The affirmation shall be accompanied by a full statement of the facts indicating such compliance.

(d) The application shall include a description of the proposed deduction, the purpose to be served thereby, and the classes of Laborers or mechanics from whose wages the proposed deduction would be made.

(e) The application shall state the name and business of any third person to whom any funds obtained from the proposed deductions are to be transmitted and the affiliation of such person, if any, with the applicant.

Section 3.8 Action by the Secretary of Labor upon applications.

The Secretary of Labor shall decide whether or not the requested deduction is permissible under provisions of 3.6; and shall notify the applicant in writing of his decision.

Section 3.9 Prohibited payroll deductions.

Deductions not elsewhere provided for by this part and which are not found to be permissible under 3.6 are prohibited.

Section 3.10 Mehtods of payment of wages.

The payment of wages shall be by cash, negotiable instruments payable on demand, or the additional forms of compensation for which deductions are permissible under this part. No other methods of payment shall be recognized on work subject to the Copeland Act.

Section 3.11 Regulations part of contract.

All contracts made with respect to the construction, prosecution, completion, or repair of any public building or public work or building or work financed in whole or in part by loans or grants from the United States covered by the regulations in this part shall expressly bind the contractor or subcontractor to comply with such of the regulations in this part as may be applicable. In this regard, see 5.5(a) of this subtitle.

SECTION F

SUPPLEMENTAL GENERAL CONDITIONS

INSTRUCTIONS FOR CONTRACTORS REGARDING DEVELOPMENT OF AFFIRMATIVE ACTION PROGRAMS UNDER EXECUTIVE ORDER 11246

Executive Order 11246, as amended, required that construction contractors on Federally-assisted construction projects not discriminate in employment because of race, color, religion, sex, or national origin. The Executive Order further requires that these contractors "take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin." An Equal Employment Opportunity Clause embracing these principles of "nondiscrimination" and "affirmative action" are required in every nonexempt federally-assisted construction contract.

The Department of Housing and Urban Development, at 24 CFR, Part 130, has issued rules and regulations, which set out, for HUD-assisted construction projects, equal employment opportunity requirements. These requirements provide that the applicant for HUD-assisted construction projects will include, or cause to be included, the equal employment opportunity clause in all non-exempt construction contracts.

HUD's rules and regulations further require that each construction contractor and subcontractor with a contract of $100,000 or more, on a HUD-assisted project costing a $1,000,000 or more develop a written affirmative action compliance program. The written affirmative action plans of contractors and subcontractors are subject to review and approval by HUD and shall:

1. Identify areas of employment, employment policies, and employment practices which require actions by the contractor or subcontractor to assure equal employment opportunity to all employees without discrimination because of race, color, religion, sex, or national origin;

2. Analyze these areas, policies and practices to determine what actions by said contractor or subcontractor will be most effective in assuring equal employment opportunity; and

3. Establish a plan, including, when there are deficiencies in minority utilization, the development of specific goals and timetables, designed to achieve equal employment opportunity through those actions identified as potentially most effective.

When developing a written affirmative action program, the contractor or subcontractor must realize that the essence of "affirmative action" is the policy of developing programs which will provide, in detail, for specific steps to guarantee equal employment opportunity keyed to the problems and needs of minority groups, including when these are deficiencies in minority utilization, the development of specific goals and timetables for prompt achievement of full equal employment opportunity. Affirmative action can be more clearly understood and effective when contractors strive toward the attainment of specific numerical goals for the employment and upgrading of minority workers within given time periods. Goals should be arrived at through analysis of present policies and practices and may provide a means by which contractors and HUD can judge the results of the specific affirmative action steps taken.

A contractor's affirmative action plan should provide at least the following elements:

I. Company's Equal Employment Opportunity Policy;

A statement which clearly states the company's policy of nondiscrimination in employment because of race, color, religion, sex, or national origin.

II. Coordination and Administration of Program:

Designate person and way to contact person who will be responsible for coordination of company's equal employment opportunity program. Also outline how policy and affirmative action program will be desiminated to all employees.

III. Analysis of:

A. Recruitment and Employment Practices;

Consider the extent to which present hiring practices and policies, including recruitment sources, act to exclude minorities from becoming applicants for employment with your company.

B. Work Force;

Consider the current extent of minority group employment in skilled, semi-skilled, and unskilled categories on all the company's projects.

C. Opportunities for Placement;

Consider the anticipated opportunities for placing new employees in skilled, semi-skilled or unskilled categories with company during the period in which the HUD-assisted work is being done.

IV. Establishment of Goals and Timetables;

Based on the analysis done in preceding Section, develop numerical goals (in numbers or percentage man-hours) to work toward within a given time period (time period within which HUD-assisted work will be done) in placing minorities in skilled, semi-skilled, or unskilled but trainee positions with your company.

V. Specific Affirmative Action Steps

Develop specific affirmative action steps which company will make in efforts to reach goals and thus provide equal employment opportunity.

SAMPLE AFFIRMATIVE ACTION PROGRAM FOR CONSTRUCTION CONTRACTOR

(Construction Company Letterhead)

Project No.: _____

Project Name: _____

Location: _____

Sponsor: _____

Affirmative Action Plan

I. Equal Employment Opportunity Policy

It is the policy of _____ Company not to discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. This policy extends to all matters relating to recruitment, hiring, promotion, transfer, recruitment or recruitment advertising, rates of pay and other forms of compensation, and selection for training.

Furthermore, it is the policy of this company to cooperate to the fullest extent with the applicable rules, regulations and orders issued pursuant to Executive Order 11246. It is intended that all officials and employees of this company be informed of this statement of policy and that this policy shall be applied to every phase of employee recruitment, including employment agencies, labor organizations and advertising.

II. Coordination and Administration of Program

1. The company vice-president, Mr. _____ will serve in the capacity of Equal Employment Opportunity Coordinator. He will be responsible for the overall administration of this Affirmative Action Plan and will assist in EEO matters at the Branch Office and at project construction sites.

2. Administration of this Plan at the project site will be the responsibility of the company's Project Manager.

3. Management will check with each superintendent bi-weekly to ensure that this company's equal employment opportunity obligations, policy, and plan are being implemented.

4. A copy of this affirmative action plan will be provided to each employee and posted on the company's bulletin boards at the main office, the branch office, and all project sites.

III. Analysis of

A. Recruitment and Employment Practices

1. We employ essentially four categories of craftsmen. Our brickmasons and equipment operators are referred from the Bricklayers Local #152 and the Operators Local #617, respectively. During the past year , Bricklayers Local #152 has referred approximately 71 employees to us, of which approximately 17, or 24% were minority. During that same period, the Operators Local #617 referred 11 employees, of which none were minority.

2. We secure our Carpenters and Laborers through walk-ins and word of mouth. During the past year we have employed approximately 63 Carpenters of which 3 were minority (approximately 5%). These were referred to the Carpenters Local #104 and admitted for membership. Of approximately 80 minority walk-in applicants, 60 were employed as Laborers.

B. Present Work Force

	Total	Non-Minority	Minority
Brickmasons	46	30	16
Operators	3	3	0
Carpenters	31	28	3
Laborers	54	5	49

C. Opportunities for Placement

During the period of the next 12 months we anticipate (because of attrition or expansion) employing maybe 50 new craftsmen by categories as follows:

Brickmasons	14
Operators	1
Carpenters	10
Laborers	25

IV. Goals and Timetables

Our minority employment goals for the next twelve month period is as follows:

Brickmasons	3
Operators	1 (oiler, trainee)
Carpenters	4

V. Specific Affirmative Action Steps

A. We will notify community organizations in writing that we are an equal opportunity employer and that we have employment opportunities available and will maintain records of the organizations' response. The following is a list of organizations we will notify:

1.
2.
3.

B. We will maintain a file of the names and addresses of each minority applicant referred to us and note what action was taken with each such referred applicant, and if the applicant was not employed, the reasons therefor. Where appropriate, applicant will be sent to union hiring hall for permit to work with our company.

C. We will promptly notify HUD when the union or unions with whom we have a collective bargaining agreement has not referred us a minority worker sent by us or we have other information that the union referral process impedes us in our efforts to meet our goals.

D. We will make specific efforts to encourage present minority employees to recruit their friends and relatives for positions we have available.

E. The company's EEO Coordinator will periodically inventory and evaluate all minority personnel in the Laborer catagory for promotional opportunities and encourage them to seek such opportunities where available.

F. The company will make sure that all facilities and company activities are non-segregated.

G. The EEO Coordinator will continually monitor all personnal activities to ensure that the company's EEO policy is being carried out.

H. We will solicit bids for subcontracts from available minority subcontractors engaged in the trades for which we need subcontractors. Where necessary, and possible, we will offer assistance to those minority subcontractors who bid or are awarded a subcontract with our company.

I. We will notify each subcontractor of his respective EEO obligation and actively cooperate with HUD in assuring compliance.

Signed: _____ (Name)

_____ (Title)

Note to Contractor:

This general outline may be used as a guide in developing an acceptable affirmative action program. Each program, however, should be tailored to the contractor's specific operation and needs.

PRINCIPLES OF AFFIRMATIVE ACTION PROGRAM FOR EQUAL EMPLOYMENT OPPORTUNITY

1. **Prepare an** Equal Employment Opportunity Policy. **Make this policy known to all the employees and potential sources of employees.**

2. **Designate a person in a managerial capacity to coordinate equal employment opportunity efforts.**

3. **Assure non-discriminatory recruiting of staff taking appropriate steps such as:**

   a. **Placing employment advertisements in newspapers which serve the largest number of minority group people in the recruiting area.**

   b. **Recruiting through schools and universities having substantial proportions of minority students.**

   c. **Maintaining systematic contacts with minority and human relations organizations, leaders, and spokesmen to encourage referral of qualified minority applicants.**

   d. **Encourage present employees to refer minority applicants.**

   e. **Making it known to all recruitment sources that qualified minority members are being sought for consideration for professional, sub-professional and other office work whenever staff is needed.**

4. **Assure non-discriminatory hiring, taking appropriate steps such as:**

   a. **Instructing personally those of the staff who make hiring decisions that minority applicants for all jobs are to be considered without discrimination.**

5. **Assure that maximum use is made of sub-professional internship and other training to help equalize opportunity for minority persons such as:**

   a. **Sponsoring and assisting minority youths, as well as others, to enter sub-professional and professional training and making such training available to the maximum extent.**

   b. **Actively encouraging minority employees, as well as others, to increase their skills and job potential through participation in available training and education programs.**

6. **Assure non-discriminatory placement and promotion.**

   a. **Instruct personally those of the staff who make placement and promotion decisions that minority employees are to be considered without discrimination.**

b. Encourage the promotion of minority employees who have increased their skills and job potential in accord with the affirmative action policies.

7. Assure non-discriminatory pay, other compensation and working conditions, taking appropriate steps as:

   a. Examining rates of pay and fringe benefits for present employees with equivalent duties, and adjusting any inequities found.

   b. Not reducing the compensation of existing employees who have been converted to on-the-job training status.

8. Encourage non-discriminatory contracting, taking appropriate steps such as encouraging minority group contractors and contractors with minority representation among their employees to submit proposals for contract work.

9. Follow through, questioning, verifying, making whatever changes or additions to the Equal Employment Opportunity Program that may be necessary to assure effectiveness.

SUPPLEMENT TO GENERAL CONDITIONS

1. SAFETY AND HEALTH REGULATIONS: The Contractor shall comply with the Department of Labor Safety and Health Regulations for Construction promulgated under the Occupational Safety and Health Act of 1970 (PL 91-596) and under Section 107 of the Contract Work and Safety Standards Act (PL 91-54). The regulations are administered by the Department of Labor and the Contractor shall allow access to the project to personnel from that Department.

2. CONTRACTOR'S PUBLIC LIABILITY AND PROPERTY DAMAGE INSURANCE AND VEHICLE LIABILITY INSURANCE: The Contractor shall procure and shall maintain during the life of this contract Contractor's Public Liability Insurance in an amount not less than $ 100,000 for injuries, including accidental death to any one person and subject to the same limit for each person, in an amount not less than $ 300,000 on account of one accident, and Contractor's Property Damage Insurance in an amount not less than $ 100,000 per accident and $100,000 aggregate.

   The Contractor shall either (1) require each of his subcontractors to procure and to maintain during the life of his subcontract, Subcontractor's Public Liability and Property Damage of the type and in the same amounts as specified in the preceding paragraph, or (2) insure the activities of his subcontractors in his own policy.

3. BUILDER'S RISK INSURANCE: As provided in the General Conditions, the Contractor will maintain Builder's Risk Insurance (fire and extended coverage) on a 100 percent completed value basis on the insurable portions of the project for the benefit of the Owner, the Contractor, and all subcontractors, as their interests may appear.

4. SCOPE OF INSURANCE AND SPECIAL HAZARDS: All insurance required in this Contract shall cover any special hazards which may be encountered in the performance of this Contract as enumerated in the General Conditions.

5. SCHEDULE OF OCCUPATIONAL CLASSIFICATIONS AND MINIMUM HOURLY WAGE RATES AS REQUIRED UNDER PARAGRAPH 52 OF THE GENERAL CONDITIONS IS ATTACHED.

	Basic Hourly Rates	Fringe Benefits Payments				
		H & W	Pensions	Vacation	App. Tr.	Others
Air conditioning mechanic	4.25					
Bricklayers	6.09					
Carpenters	4.75					
Cement masons	5.42					
Dry wall finisher	4.96					
Electricians	4.92					
Millwrights	8.85					
Glaziers	3.45					
Ironworkers:						
Structural, Ornamental & Reinforcing	5.03					
Laborers:						
Unskilled	2.46					
Mason tenders	2.50					
Mortar mixers	2.50					
Pipelayers, concrete & clay	2.50					
Painters, brush	5.00					
Marble & tile setters, terrazzo workers	5.00					
Plumbers	6.99					
Roofers	3.50					
Sheet metal workers	5.17					
Soft floor layers	4.00					
Truck drivers	2.56					
Welders - rate for craft.						
POWER EQUIPMENT OPERATORS:						
Air compressors	3.60					
Asphalt rollers	2.48					
Asphalt spreaders	2.65					
Bulldozers	3.00					
Cranes, derricks, draglines	6.15					
Drill rig	5.54					
Forklift	3.50					
Front end loader	4.00					
Motor grader	4.00					
Oilers	4.93					

U. S. DEPARTMENT OF LABOR
EMPLOYMENT STANDARDS ADMINISTRATION

REQUEST FOR DETERMINATION AND RESPONSE TO REQUEST

DBL
(Davis Bacon Act and Related Acts)

FOR DEPARTMENT OF LABOR USE:

Response To Request

a. ☐ Use area determination issued for this area

b. ☑ The attached decision noted below is applicable to this project

Decision Number
T-GA-613

Date of Decision
11/22/77

Expires
3/21/78

Superseded Decision Number

Approved

Director
Division of Construction
Wage Determinations
Wage and Hour Division

Requesting Officer (typed name and signature)
Elaine Wabich
Elaine Wabich

Department, Agency, or Bureau
DHUD-AAO

Phone Number
221-4637

Date of Request
10/17/77

Est. Advertising Date
Dec. 1, 1977

Est. Bid Opening Date
Dec. 29, 1977

Prior Decision Number (if any)

Est. $ Value of Contract
☐ Under ½ Mil. ☐ 1 to 5 Mil.
☒ ½ to 1 Mil. ☐ Over 5 Mil.

Type of Work
☒ Bldg. ☐ Highway
☐ Resid. ☐ Heavy

Location of Project (city or other description)
Athens, Clarke County, Georgia

County
Clarke

State
Georgia

Address to which wage determination should be mailed. Must be complete and include ZIP Code. (Print or type)

Department of Housing and Urban Development
230 Peachtree Street, NW
Atlanta, Georgia 30303

ATTENTION: Elaine Wabich

Wage Survey by Agency Attached
☐ YES ☐ NO N/A

Wage Survey by Agency in Progress
☐ YES ☐ NO N/A

Description of Work (Be specific) (Print or type)
Construction of Fire Station Per Community Development Block Grant B-77-HN-13-0003.

CHECK OFF LIST CRAFTS NEEDED
(Attach continuation sheet if needed)

- X Asbestos workers
- X Boilermakers
- X Bricklayers
- X Carpenters
- X Cement masons
- X Electricians Commercial &
- X Glaziers Industrial
- X Ironworkers
- X Laborers, (specify classes)
- X A.C. Mechanic
- X Dry Wall Finisher
- X Lathers
- X Marble & tile setters, terrazzo workers
- X Painters
- X Pile drivers
- X Plasterers
- X Plumbers
- X Roofers
- X Sheet metal workers
- X Soil floor layers
- X Steamfitters
- X Welders--rate for craft
- X Truck drivers
- X Power equipment operators (specify types)
- X Front-End Loaders
- X Back Hoe

Other crafts

F-9

(THIS REPLACES FORMS DB-11 & DB-11a)

STANDARD

CORRELATION AND INTENT OF DOCUMENTS

The contract documents are complementary, and what is called for by one shall be as binding as if called for by all. The intention of the documents is to include all labor and materials, equipment, and transportation necessary for the proper execution of the work. It is not intended, however, that materials or work not covered by or properly inferable from any heading, branch, class or trade of the specifications shall be supplied unless distinctly noted on the drawings. Materials or work described in words which so applied have a well-known technical or trade meaning shall be held to refer to such recognized standards. In the event the architect shall have used such phrases anywhere in the specifications as: "Work indicated on the drawings and herein specified", "work shown and specified", "in accordance with drawings and specifications", "indicated on the drawings and specifications", "in accordance with specifications and applicable drawings", "these specifications and the accompanying drawings", "as indicated on the drawings and as specified herein", or similar expressions, they shall not be deemed to be and are not a defeasance of the provisions under the present article of the general conditions, and they are not to be construed as requiring work to be called for both in the specifications and in the drawings in order to be a requirement under the contract. Any of the aforesaid conjunctive expressions and phrases or any cross-references between drawings and specifications, between specifications and specifications, or between drawings and drawings to the contrary notwithstanding, the contract documents are complementary, and what is called for by one shall be as binding as if called for by all.

PAYMENTS WITHHELD

The architect may withhold or, on account of subsequently discovered evidence, nullify the whole or a part of any certificate to such extent as may be necessary to protect the owner from loss on account of:

(a) Defective work not remedied.
(b) Claims filed or reasonable evidence indicating probable filing of claims.
(c) Failure of the contractor to make payments properly to subcontractors or for materials or labor.
(d) A reasonable doubt that the contract can be completed for the balance then unpaid.
(e) Damage to another contractor or to some third party.
(f) Failure to maintain a rate of progress in accordance with the construction progress schedule.
(g) Failure to supply enough skilled workmen or proper materials.

When the above grounds are removed, payment shall be made for amounts withheld because of them. At the option of the owner adherence to the construction progress schedule shall be a condition precedent to the right of the contractor to demand payment of a periodical estimate. No omission on the part of the owner to exercise the aforesaid option shall be construed to be a waiver of breach of the construction progress schedule or acquiescence therein, and the owner may exercise its option from time to time and as often as may be expedient.

NOTICE OF READINESS FOR FINAL INSPECTION

When the contractor is ready for a final inspection, he shall give notice to the architect with a copy to the owner in the following words:

> The work on the contract for the (show name of project as it appears in the form of agreement) having been fully completed except as stipulated hereinbelow, it is requested that a final inspection be made promptly by the architect. The following work is incomplete through no fault of the contractor (list any work which the contractor regards as a proper exception).

No final inspection shall be made until such time as the architect has received a letter in the exact form indicated above and a copy thereof has been received by the owner. In the event the contractor shall have issued the "Notice of Readiness for Final Inspection" prematurely he shall be liable for the damage resulting from the aforesaid false start including but not limited to the salaries, professional fees, and travel and living expenses of the persons or parties inconvenienced by the aforesaid false start. The contractor acknowledges and agrees that he has an undivisible, indelegable, and intransferable contractual obligation to the owner to make his own inspections of his own work at all stages of construction; and he shall supervise and superintend performance of the contract in such manner as to enable him to confirm and corroborate at all times that all work has been executed strictly, literally, rigidly, and inflexibly in accordance with the methods and materials designated in the contract documents. Accordingly, the contractor agrees that he may not defend or excuse any deviation from the contract documents on the ground (a) that the deviation was not brought to his attention by another person or party or other persons or parties or (b) that a subcontractor is or subcontractors are at fault.

RE-EXAMINATION OR RE-TESTING OF WORK COVERED PURSUANT TO CONSENT OF ARCHITECT

Re-examination or retesting of questioned work covered pursuant to consent of the architect may be ordered by the architect, and if so ordered the work must be uncovered by the contractor. If such work be found in accordance with the contract documents the owner shall pay the cost of re-examination and replacement or of re-testing. If such work be found not in accordance with the contract documents the contractor shall pay such cost.

INSPECTION DOES NOT RELIEVE CONTRACTOR

Under the contract documents the contractor has assumed the responsibility of furnishing all services, labor, and materials for the entire work in accordance with such documents. No provisions of this article nor any inspection of the work by the owner, representatives of the owner, resident engineer inspector, clerk-of-the-works, engineers employed by the architect, representatives of the architect, or the architect shall in any way diminish, relieve, or alter said responsibility and undertaking of the contractor; nor shall the omission of any of the foregoing to discover or to bring to the attention of the contractor the existence of any work or materials injured or done not in accordance with said contract documents in any way diminish, relieve, or alter such obligation of the contractor nor shall the aforesaid omission diminish or alter the rights or remedies of the owner as set forth in the contract documents.

SUBSTITUTIONS FOR SPECIFIED EQUIPMENT OR MATERIALS

When reference is made in the contract documents to trade names or to the names of manufacturers, such references are made solely to designate and identify the quality of materials or equipment to be furnished and are not intended to restrict competitive bidding. If it is desired to use materials or equipment of trade names or of manufacturers' names which are different from those mentioned in the contract documents, application for the approval of the use of the specified materials or the specified items of equipment as manufactured by firms other than those named in the contract documents must reach the hands of the architect at least ten days prior to the date set for the opening of bids. The burden of proving equality of a proposed substitute to an item designated by trade name or by a manufacturer's name in the contract documents rests on the party submitting the request for approval. To be acceptable, a proposed substitute must, in addition, meet or exceed all express requirements of the contract documents. If the submittal is approved by the Architect, an addendum will be issued to all prospective bidders at least five days prior to the date set for the opening of bids.

KEYS

Keys with tags indicating number and/or description of door or room each key is intended to fit attached to each key shall be delivered to the owner. Contractor shall prepare and furnish with the keys an itemized key schedule in quintuplicate listing the door or room number and/or description, serial numbers of key, and number of keys being delivered for each door or lock.

MECHANICAL SYSTEMS, RETAINAGE PENDING BALANCING OF

If the work includes a heating system, there shall be withheld from the retainage of the contractor one-half of one percent of the amount shown on the breakdown of the contractor for the heating system until such time as the architect shall have certified that the heating system has been balanced under seasonable weather conditions, Provided: That the amount withheld shall in no event be less than $500.00; and if the work includes an air conditioning system, the same provision shall apply to the said air conditioning system.

UTILITIES

Pending the extension and connection of permanent water and permanent electric power, the contractor shall obtain temporary water and temporary electric power at his own expense. In the absence of provisions to the contrary, the contractor shall pay for all utilities services until the final certificate has been executed or until the work is occupied, whichever is the earlier.

PRECONSTRUCTION CONFERENCE

The contractor shall meet with the architect and the representative of the owner at a preconstruction conference to be held not later than seven days after the contractor has received notification of the award of the contract. The contractor shall have present at the preconstruction conference the job superintendent, plumbing subcontractor, heating, air conditioning and ventilating subcontractor and electrical subcontractor.

AFFIDAVITS

Before acceptance of work the contractor will be required to furnish Statutory Affidavit in duplicate in the exact form as shown hereinafter.

STATUTORY AFFIDAVIT

STATE OF GEORGIA, COUNTY OF _____

FROM _____
(Contractor)

TO _____
(Insert name of Owner as shown in Specifications)

_____

RE: Contract entered into the _____day of _____, 19 _____ between the above-mentioned parties for the construction of a

_____

_____

at _____

KNOWN ALL MEN BY THESE PRESENTS:

1. The undersigned hereby certifies that all work required under the above contract has been performed in accordance with the terms thereof, that all materialmen, subcontractors, mechanics, and laborers have been paid and satisfied in full and that there are no outstanding claims of any character arising out of the performance of the contract which have not been paid and satisfied in full.

2. The undersigned further certifies that to the best of his knowledge and belief there are no unsatisfied claims for damages resulting from injury or death to any employees, subcontractors, or the public at large arising out of the performance of the contract, or any suits or claims for any other damage of any kind, nature, or description which might constitute a lien upon the property of the Owner.

3. The undersigned makes this affidavit as provided by law and for the purpose of receiving final payment in full settlement of all claims arising under or by virtue of the contract and acceptance of such payment is acknowledged as a release of the Owner from any and all claims arising under or by virtue of the contract.

IN WITNESS WHEREOF, the undersigned has signed and sealed this instrument this _____ day of _____, 19 _____.

_____

_____

Personally appeared before the undersigned, _____ and _____ who after being duly sworn, depose (s) and say(s) that the facts stated in the above affidavit are true. This _____ day of _____, 19_____.

_____
Notary Public, _____ County, Ga.
My commission expires _____.

SECTION 1A

ALTERNATES

1. BIDDERS shall submit a proposal on the following alternate. The alternate shall comply with all requirements of the drawings and provisions of the specifications for the base proposal. Guarantees to be furnished in connection with the alternate shall in every way conform to those required for the base proposal items supplanted by the alternates. The amount stated in the bid of any bidder shall include changes in his work made necessary by the acceptance of the alternate.

2. ALTERNATE NO. 1 - The Contractor shall state in his proposal the amount that may be deducted if the Vehicle Maintenance Building, the concrete entrance drive from the main fire station drive and the air line to the gas pumps are deleted in their entirety.

SECTION 2A

EARTHWORK

1. GENERAL:

   A. Preparation of ground surface for fill: Remove 12" layer of top soil from areas to receive fill. Stockpile useable top soil on site for redistribution as specified herein.

   B. Remove stump roots, brush, heavy sod, and rubbish from areas to receive fill. Haul debris from site. Remove trees indicated on site plan.

   C. Test:

      (1) Compaction test shall be determined and controlled in accordance with ASTM D-698.

      (2) Minimum density of material in area of compacted fill under buildings shall be 95% of the laboratory maximum densities at optimum moisture content as determined in accordance with ASTM D-698.

      (3) In place densities that fail to meet or exceed the required percentage when tested in accordance with ASTM D-2167, ASTM D-1556, or ASTM D-2922, shall require additional compaction. Cost of additional compaction test occasioned by the failure of material to meet required compaction requirements shall be borne by the Contractor. Owner shall pay for initial testing.

      (4) In place density test shall be made at a rate of one test per two feet of compacted fill per 2000 square feet of filled area.

      (5) Forty-eight hours advance notice shall be given for compaction test and other job site inspections required in this section.

      (6) Sample: Contractors shall furnish minimum 25 lbs. of fill material to be used in the compacted fill area for qualitative analysis. Soil shall be obtained from the location from which to placement of fill material on the site. A soil sample shall be furnished for each location from which fill will be taken.

      (7) Contractor shall not rely on results of test taken by Owner: See Article 11 of General Conditions.

   D. Protection of existing utilities: Existing utility lines that are shown on the drawings or the locations of which are made known to the Contractor prior to excavation and that are to be retained, as well as utility lines constructed during excavation, shall be protected from damage during excavation and backfilling. Cost of repair to damaged utilities shall be borne by contractor.

2. PRODUCTS:

   A. Fill material for compacted fill areas shall be minimum Class 11-B sand clay according to Paragraph 810.01 of State Highway Department of Georgia Standard Specification dated April 20, 1972.

3. EXECUTION:

A. Limits of compacted fill: Building area including exterior concrete slabs and an area 10' wide around building perimeter.

B. Site shall be prepared to obtain grade lines as indicated. Maximum deviation from established finished elevations shall be plus or minus .1. Grades not otherwise indicated shall be brought to uniform levels or slopes between points where elevations are given or between such points and existing finished grades. Develop these grades to drain away from building on all sides and to leave no pockets in the vicinity of the building.

C. Fill placement: Place fill within compacted fill limits in successive lifts not to exceed 6" after compaction. Compact each lift using sheepsfoot rollers, pneumatic rollers, vibratory rollers, or mechanical tampers. Fill directly under concrete slabs shall be brought to even plane at elevations indicated.

D. Areas outside limits of compacted fill shall be brought to grades indicated with density of material being 85% minimum. Class 11-B sand clay shall be used in these areas.

E. Top soil shall be spread in a layer 6" thick over filled area or cut areas and fine graded to grades indicated.

F. Excavations: Excavation may be accomplished by any customary methods. All excavation work shall be clean cut and true with the bottoms level and sound. The excavations shall be extended to the depths and sizes indicated. Earth banks may be used to form the sides of the footings. Where the earth is not sufficiently firm, wood forms will be required.

G. Excavation carried too low: If excavations for footings are carried below the indicated or specified levels without authorizations, they shall be refilled to the required level with concrete of the class specified for footings, without extra cost.

H. Upon completion of all foundation excavations, properly placing all footing reinforcing and before any concrete footings are poured, Contractor shall request Architect to inspect all excavations. No footings shall be poured until excavations have been approved by Architect.

I. Backfilling around foundation walls shall be delayed until the concrete and mortar have cured sufficiently to withstand the load of the backfill. Thin backfilling shall be promptly accomplished. Space to be backfilled shall be cleaned of all debris before backfill is placed.

J. Water: Contractor shall furnish all labor, pumps, inclosures, and equipment to protect and keep excavations free of water.

K. Pipe testing: Before concrete slabs are poured, all pipes under slabs on grade shall have received specified tests, and these test results shall be approved by the Architect.

L. Frost Protection: Do not place footings or slabs on frozen ground. When freezing weather may be expected, do not excavate to the full depth as indicated, unless the footings or slabs can be placed immediately after the excavation has been completed. Protect excavated bottoms from frost if placing of concrete is delayed.

M. See site plan for area in which additional soil is to be removed to a depth of 3'-0" below existing grade. Contractor shall notify Architect 48 hours in advance of this operation. Top soil from this area shall not be used for compacted fill. During the removal operation in this area the Architect may reduce the area and depth of soil to be removed, in which case a credit to the Owner by change order will be given. Any increase in area or depth of soil to be removed will be handled by an additive change order.

SECTION 2B

SOIL POISONING

1. GENERAL:

A. Soil poisoning shall be applied by a pest control applicator licensed by the State of Georgia and who has been in business for not less than 5 years.

B. Guarantee:
(1) A written guarantee shall be furnished the Owner upon completion of the work which shall provide that the said poisoning treatment shall prevent subterranean termites from attacking the building and/or its contents for a period of not less than 5 years from date of substantial completion.

(2) If subterranean termite activity exists in or under the building during the guarantee period, the Contractor promptly and without expense to the Owner will:
(a) Retreat the soil to prevent subterranean termites from attacking the building and/or its contents, using means acceptable to the Owner; and
(b) Make good all damage caused by subterranean termite activity.

(3) The guarantee shall contain the Owner optional renewal clause which may be continued beyond the five year guarantee period.

2. PRODUCTS:

A. Working solutions must contain one or more of the following chemicals in the concentration recommended and shall be water based emulsions.

(1) Aldrin - 4EC - 0.5% - dilution ratios 95:1.
(2) Chlordane - 8 - 0.5% - dilution ratios 95:1.

3. EXECUTION:

A. Preliminary requirements:

(1) Soil poisoning solution shall be mixed on the site.
(2) Contractor shall give Architect 48 hours prior notice before commencement of mixing chemicals and treatment.
(3) Concentrate shall be brought to site in labeled unopened containers bearing manufacturers name and percent of concentrate.
(4) Mixing of chemicals shall commence only in the presence of the Architect.
(5) Chemical solution shall not be applied when rain is threatened or when ground is already wet from rain in the previous 24 hours.

(6) Chemical solution shall be applied after fill has been brought to correct grade, compacted and before gravel fill is placed.
(7) If rain occurs before treated areas have been covered with gravel fill and vapor barrier, Contractor shall retreat affected areas without additional cost.
(8) Area to be treated shall be free of roots and other organic materials.

B. Application:

(1) Concrete floor slabs on grade: Minimum of one gallon of soil poisoning solution shall be uniformly applied to each 10 sq. ft. of ground area to be treated. Ground areas beneath concrete slabs-on-grade which abut principal building walls shall be similarly treated for distance of not less than 3 feet from the building.
(2) Perimeter foundation wall and interior foundation walls: Uniformly apply a minimum of one gallon of soil poisoning on each side of walls for each 2-1/2 lineal feet of wall. Apply in a narrow trench extending a maximum of 16 inches in depth or to top of footing as the case may be.
(3) Pipes in concrete slabs: In addition to the soil poisoning required under other paragraphs, uniformly apply two gallons of soil poisoning at each plumbing, heating or electrical pipe that will penetrate the concrete slab.
(4) Floor joints in concrete slabs: In the depression prepared for the concrete, apply two gallons of soil poisoning for each five lineal feet of floor joints.

SECTION 3A

CAST-IN-PLACE CONCRETE AND REINFORCING

1. GENERAL:

   A. Reference Standard:

      (1) Incorporated herein by reference and made a part hereof is American Concrete Institute Standard No. 301-66, in its entirety, with modifications, exclusions, and/or supplements noted hereinafter. Recommended standards of Paragraph 106 of ACI 301-66 shall become a part of the requirements of this section.
      (2) Items noted thus (*---) refer to indicated section of the reference standard, but shall not be construed to render inapplicable the other sections or subdivisions of the same section, unless they are options.
      (3) Copies of the reference standard are obtainable at a nominal cost from the American Concrete Institute, P. O. Box 4754, Redford Station, Detroit, Michigan 48219. A copy of this standard shall be kept on hand in the job site office at all times.

   B. Shop Drawings:

      (1) Submit in 5 copies and obtain final corrections from review prior to fabrication. Review shall not relieve Contractor from responsibility to comply with requirements of contract documents.
      (2) Reinforcing Steel: Show dimensions, schedules, bending details and bar lists, and placing plans. (*103)
      (3) Checking: The Contractor shall require that the material supplier submit a signed written statement, in conjunction with the shop drawing submittal, that the drawings have been checked for compliance with the contract requirements. Such checking shall include but not be limited to size, shape, length, quantity and location. The checking shall have been performed by a person or persons regularly engaged in drawing checking, and shall not be the person or persons who prepared the drawings.

2. PRODUCTS:

   A. Materials:

      (1) Admixtures: Air-entraining admixtures, ASTM Designation C-260-66T, will be required in all concrete. No other admixture will be permitted. (*202)

(2) Drainage fill at slabs on grade: Clean, uncoated gravel or crushed stone, free from shale or other soft material, ranging from 3/4" to 1-1/2" in size and screened of all fines. (Omit under Basement slab.)
(3) Polethylene Film: 6 mils thickness.
(4) Reinforcing steel shall conform to ASTM Designation A-615-68, Grade 60, of 60,000 psi yield point strength. (*502)
(5) Premolded expansion joint filler shall conform to ASTM Designation D-1751-65, non-extruding type. (*602)
(6) Permanent Metal Forms: Standard Corruform by Granco Steel Products Co., Strongform SF-1 by Bowman Construction Products, or Tensileform 50 by Wheeling Corrugating Co.; corrugated, galvanized high-strength steel sheets having at least 0.015 inch thickness and 90,000 psi tensile strength, with corrugations approximately 9/16" high and on 2-3/8" centers, and of lengths to fit support spacing.
(7) Integral coloring for concrete slab on grade in Equipment Room shall be Davis Colors, manufactured by Frank D. Davis Co., Rockwood Industries, Inc. Color shall be selected by the Architect from manufacturer's standard colors, and shall be in the light brown range. Submit color sample of not less than one square foot area to Architect for review and comparison with finished work.
(8) Waterstops shall be polyvinyl chloride conforming to U.S. Corps of Engineers Specification CRD C-572, 3/16" thickness with ribbed ends, 6" long with 21/32" O.D. center bulb at expansion joints and 5" long at construction joints. (*603)

B. Mix Designs:

(1) Submit mix designs and test reports thereof for approval, at no added cost to the Owner. Establish in accord with Method 2 or Alternate Procedure (d), but shall contain not less than 5.8 bags of cement per cubic yard. (*308)
(2) Concrete shall be working stress type. (*302)
(3) Concrete shall develop 3000 psi compressive strength at 28 days and shall be of normal weight. (*303)
(4) Durability: Concrete exposed to weather shall contain an air-entraining agent for protection against potentially destructive exposure. (*304)
(5) Slump may be a maximum of 5" for concrete of normal weight which is not to be vibrated. (*305)

C. Formwork: Earth cuts may be used as forms for footings only where sides of cut will stand without danger of caving. (*401 & 402)

3. EXECUTION:

A. Placing:

(1) Drainage Fill: Roll thoroughly and tamp to level of at least the thickness shown when tamped, and cover with polyethylene film laid in greatest practicable lengths and lapped at least 8".

(2) Premolded Expansion Joint Filler: Provide at intersections of grade slabs and masonry walls, at intervals not to exceed 40' in outside walks, and elsewhere as shown. (*602)

(3) Permanent Metal Forms: Place with corrugation edges up and corrugations at right angles to supports. Make end laps at least 3" and at supports only; lap one corrugation at sides. Attach sheets to supports by plug welding through curved washers; at end laps weld top sheet in valley of side lap through 4 sheet thicknesses and again at middle of sheet; at intermediate supports weld in valley of side lap at every other support and in valley of center corrugation at intervening supports.

(4) Integral coloring for concrete slab in Equipment Room shall be utilized in strict accord with manufacturer's instructions, copies of which must be submitted to the Architect for his review prior to commencement of this phase of work. Coloring shall be thoroughly mixed with concrete, and color shall be uniform throughout. Floor shall be given a trowel finish in accord with the appropriate section of the referenced specification. After finishing, floor shall be given one coat of clear Floor Coat manufactured by Master Builders Co., and applied in strict accord with their instructions.

B. Jointing: Interior slabs on grade shall have control joints only where noted. Provide either metal (to be left in place) or wood key-ways of contours shown. Forms shall be securely held in place. Paint face of joint to prevent bonding. Discontinue reinforcing across joint. At outside walks and platforms score joints in mechanically true alignment, using jointing tool and straightedge guide; round perimeter edges similarly to approximately 1/4" radius. (*1102)

C. Workmanship:

(1) Flatwork: Any floor whose out-of-plane dimension exceeds tolerances permitted for Class B finish shall be ground and/or filled to meet them. Filling shall be accomplished through use of an approved epoxy-base patching compound applied in strict accordance with manufacturer's recommendations; strength of compound shall be not less than 5000 psi in 7 days and compound shall be suitable for forming feather-edges. Manufacturer and Contractor shall furnish a written guarantee covering strength of compound and its bonding to base concrete without separation. (*Chapter 11)

(2) See finish schedule for type finish of exposed concrete.

D. Field Testing:

(1) The Architect will select a recognized commercial testing laboratory and will approve invoices for Owner to pay

direct to laboratory the costs of concrete testing services, except costs occasioned by failure of materials or concrete to meet specification requirements, which costs shall be borne in their entirety by the Contractor, regardless of the outcome of such further testing.

(2) Services by Contractor: The following functions shall be performed by personnel who have been qualified by the Georgia Qualification Committee for Field Tests of Concrete and shall be provided by the Contractor at no extra cost to Owner.

(a) Sampling fresh concrete and making compression test specimens.
(b) Performing tests for slump, air content, and unit weight of concrete as are required by the project specifications.
(c) Protecting and initially curing test specimens for the first 24 hours after sampling.
(d) Transporting or preparing and shipping test specimens to designated laboratory.
(e) Completing field test data sheet for each set of concrete test specimens and transmitting same to designated laboratory. Data sheets shall include slump, air content, and unit weight, and the name and qualification number of the person responsible for their preparation.

(3) Advance 7-Day Test: In addition to the number of cylinders required by ACI Standard 301-66, the Contractor shall mold and the laboratory will test one cylinder at 7 days which will be solely for advance information. (*Chapter 16)

E. Curing & Hardener: Use of curing compounds is prohibited for initial curing. After final curing, treat interior floors scheduled as concrete with trowel finish, with 3 full even applications of liquid floor hardener according to manufacturer's written instructions, using Davison Chemical's Concrete Hardener, Euclid Chemical Company's Euco, A. C. Horn Products' Hornolith, or Sonneborn Building Products' Lapidolith.

SECTION 3B

LIGHTWEIGHT CEMENTITIOUS ROOF DECK

1. GENERAL:

   A. Submittals: Submit shop drawings in accord with General Conditions for Architect's review. Information on shop drawings should include (but not be limited to) materials and material layout, edge and end conditions and extent, thicknesses, method and sequence of deck attachment. Submit manufacturer's printed information relating to all phases of application of fill. Do not proceed with work in this phase until Architect's review is complete.

2. PRODUCTS:

   A. Materials:

      (1) Permanent Metal Deck Forms: High strength steel sheets having a yield strength of at least 90,000 psi, of not less than 28 gauge thickness, corrugated to nominal pattern of 9/16" x 2-1/2", galvanized to conform to ASTM Designation A-446-69 for Grade E steel with at least 1.25 ounces of zinc coating per square foot; Cyclops Corporations' Strongform SF-1, Wheeling Corrugating Company's Tensileform/Tensilevent TF-50, or Granco Steel Products Company's Standard Corruform. Furnish vent clips of 24-gauge galvanized steel where built-in pattern of sheets does not provide automatically for complete venting.
      (2) Water: Clean and free from deleterious amounts of acid, alkali and organic materials.
      (3) Portland Cement: ASTM Designation C-150-69a, Type I or Type III; or for air-entraining Portland cement, ASTM Designation C-175-69, Type IA or Type IIIA.
      (4) Lightweight Aggregate: ASTM Designation C-332-66, Group I, of unit weight not less than 6 nor more than 10 pounds per cubic feet.
      (5) Insulating Board shall be "Insulperm Insulation" as described by W. R. Grace Co., in their Data Sheet RD-253, dated effective 1 December 1973.
      (6) General: Store packaged materials as delivered with original identification, in moisture-proof storehouse.

3. EXECUTION:

   A. Placing:

      (1) Metal Deck Forms: Place according to approved shop drawings showing location, spacings, extent and connections of deck sheets. Place with corrugation edges up and with corrugations

at right angles to supports. Make ends lap at least 2-inches and at supports only, with bottom sheets not to extend beyond supporting flange; lap one corrugation at sides. Attach sheets to supports by plug welding through washers furnished by deck manufacturer; at end laps, weld top sheet in valley of side lap through 4-sheet thicknesses and again at middle of sheet; at intermediate supports, weld top sheet in valley of side lap at each support. Where manufacturer's clips are required for venting, insert clips at side lap of each sheet, one at mid-point of spans of 4-feet or less, and 2 at third points of longer spans.

(2) Lightweight Concrete Fill: Conform to ANSI Specification A-122.1-1965. Design mix shall produce compressive strength of at least 125 psi at 28 days, with oven-dry density between 22 and 28 pounds per cubic foot.

(a) Lightweight aggregate shall be established type vermiculite; or at Contractor's option, plain type vermiculite with air-entraining agent added on the job. Air-entraining agent shall be liquid NVX used at rate of one pint to 4 cubic feet of plain type vermiculite aggregate; no other form of entraining agent is acceptable, and proportion used shall be maintained uniformly throughout.

(b) Proportions: One 94-pound bag of Portland cement to 6 cubic feet of lightweight aggregate.

(c) Test Samples: Furnish printed instruction of aggregate manufacturer on sampling, curing, testing and reporting, and conform strictly thereto. At least 4 samples of concrete, each 3 by 6-inches in size, shall be taken during each day's pour, prepared according to ASTM Designation C-495-69, and accompanied by field reports of daily wet density checks, to indicate ultimate physical qualities of the concrete. Completed reports shall show wet density, dry density and compressive strength for each sample and for the overall average of samples. Tests and reports shall be made by lightweight aggregate manufacturer's representative, or by a superintendent of the applicator trained and approved by the manufacturer, at no added cost to Owner.

(d) Mixing shall be done by machine, with specified amounts of water, air-entraining agent if used, Portland cement and lightweight aggregate charged in that sequence, for a period of one to five minutes to produce a mix which will flow freely and allow screeding.

(3) Imbedded Insulation Board: Install "Insulperm Insulation Board" in strict accord with W. R. Grace Data Sheet RD-253 mentioned above. Board thicknesses shall be varied such that the board will imbed in the slurry coat over the deck, and provide not less than 2" nor more than 3-1/2" thickness of Zonolite fill over the top of the board.

(4) Fill shall be placed immediately after mixing in order to avoid any appreciable change in consistency, but shall not be done when air temperature is below 30 degrees F., or when standing water, snow or ice are present on the metal deck surface; no calcium chloride or admixture containing chloride salts may be used. When air temperatures between 30 and 40 degrees F. are predicted during the first 24 hours to 72 hours after pouring, work shall not commence without the adoption of special procedures stipulated by the aggregate manufacturer, printed copies of which shall have been furnished to the Architect and Job Office. Completed concrete deck surfaces shall be screeded smooth and even, firmly bound, free from loose material, for application of roofing.

SECTION 3C

PRECAST CONCRETE PANELS

1. GENERAL:

   A. Reference Standard: Except where exceeded hereby, conform to Standard Specification APA-101-67T for Architectural Precast Concrete and Cast Stone, as published by Architectural Precast Association.

   B. Qualifications:

      (1) Manufacturer shall show evidence of at least 3 years of experience in production of the types of units specified hereinafter, and of successful completion of comparable projects during that period, citing specific examples. Submit letter to Architect.

      (2) Erection Supervisor shall show evidence of at least 3 years of experience in erection of precast concrete units, and of successful completion of comparable projects during that period, citing specific examples. Submit letter to Architect.

   C. Submittals:

      (1) Shop Drawings: Submit for work hereunder to show in detail the profiles, dimensions, reinforcing, inserts, lifting devices, setting, jointing, anchoring, supporting and flashing of each type unit. Each unit shall be numbered on drawings and correspondingly on its actual bed or back.

      (2) Samples: Submit for approval one sample of the precast product, 2' by 2' by 6 inches thick. Sample shall show typical face finish, edge radius an groove for supporting angle lug.

   D. Product Handling: Protect units against chipping, staining and other damage during crating, delivery, storage and erecting in place.

2. PRODUCTS:

   A. Materials:

      (1) Water shall be free of acid, alkalis, oils and organic material to interfere with setting of cement.

      (2) Portland Cement: ASTM Designation C-150-69a, Type I or III; units shall be monolithically cast. Concrete shall have a developed strength of 3000 psi.

      (3) Fine and Coarse Aggregates: Clean, hard, durable, inert material free of deleterious substances, conforming to ASTM Designation C-33-67, to be consistent in quality, gradationand color throughout for work hereunder.

(4) Reinforcing Steel:

(a) Bars meeting ASTM Designations A-615-70 for intermediate grade billet steel, or A-161-70 for rail steel, of at least 40,000 psi yield point strength.

(5) Embedded inserts shall be type PCW by Hohmann and Barnard, Inc. Products by Heckmann Building Products and Richmond Screw Anchor Products are acceptable. Unit shall be malleable iron, electro-zinc plated to accommodate 3/4" bolts.

(6) Anchorage Hardware: Bolts, nuts, washers and other standard hardware shall be hot-dip galvanized after fabrication.

(7) Lead Shims: Size 2 by 2 inches, built-up in layers of sheet lead weighing not less than 2 pounds per square foot.

(8) Design of Reinforcement: Unit reinforcing and anchoring devices as shown are designed as the minimum in order to resist dead and live loads to be imposed with the work complete in place. In addition, the Contractor shall provide lifting devices and further reinforcement to withstand stresses to be encountered in transporting, handling and erecting without damage to the units.

(9) Concrete Quality:

(a) Mix shall produce a compressive strength of at least 3000 psi for Type V concrete at 28 days, when tested on 6 by 12 inch cylinders according to ASTM Designation C-39-66, with cement content not less than 5.8 bags per cubic yard, and minimum water-cement ratio ; and shall produce a maximum water absorption not to exceed 6% of dry weight when tested according to ASTM Designation C-140-70. Mixing shall be done mechanically, with coarse and fine aggregate evenly distributed.

(b) Testing: A set of 4 test cylinders shall be made with each sample to determine the quality of concrete before production is started. At least 4 test cylinders for every 5 cubic yards of concrete shall be taken during production to maintain quality control. One each set, 2 cylinders shall be tested at 7 days, and 2 at 28 days. Casting and curing of test cylinders shall be identical with actual method of production of the units. Tests may be conducted by manufacturer, and certified reports thereof shall be furnished to the Architect at no additional cost to Owner.

(10) Fabrication:

(a) Workmanship: Provide accurate profiles, shapes and dimensions, with exposed faces straight and true; arrises may be eased uniformaly to slight radius, but shall be in mechanically true alignment. Molds shall be dimensionally accurate and stable, and designed to withstand high frequency vibration, which shall be continuous during the casting process until a full specified thickness is reach and excess water is brought to the surface. Panels with bumps, dimples and depressions in exposed faces will not be acceptable.

(1) Embedded Reinforcing & Inserts: Set, support and maintain in alignment during casting, and secure inserts to reinforcement.

(2) Dimensional Tolerances of individual units shall be:

(a) Overall Dimensions: Plus 1/16 or minus 1/8 inch in 10 lineal feet, but not to exceed a total of plus 1/8 or minus 1/4 inch in 20 lineal feet.

(b) Cross-Sectional Dimensions: Sections over 3 inches, plus or minus 1/8 inch.

(c) Deviation from Straight Line in long sections, not more than 1/4 inch in 20 lineal feet.

(b) Curing: Provide moisture for hydration of cement, and maintain at temperature of at least 50 degrees F. for 7 days or 70 degrees F. for 4 days. Avoid rapid drying at end of curing period.

3. EXECUTION:

A. Preliminary Inspection: Examine each unit before setting in place, to insure that edges and arrises are sharp and without chips or serrations, which will not be acceptable in finished work. Obtain Architect's advance approval of any units in question before proceeding.

B. Erection: First class workmanship by competent stone masons is required hereunder. Set each unit true to line, level and plumb, anchored in place, and without pressure to compensate for misalignment, warpage or undue strain. Keep faces of units free from mortar. Provide temporary support for positive alignment while anchoring. Position succeeding panels so that dimensional tolerances specified hereinabove are not allowed to accumulate, and that vertical joints are uniform in width within limits of 1/2 inch. Bolting of angles and inserts shall utilize askew heads or sloping washers to provide full bearing, and shall be tightened by equal torquing.

C. Parapets: Fill with setting mortar any holes left at tops or panels through use of embedded lifting devices, and any irregularities at backs of panels projecting above roof line, to provide smooth surfaces for application of parapet flashing.

D. Joint backing and caulk are specified under Section 7D - Caulk.

SECTION 4A

MASONRY MORTAR

1. GENERAL:

   A. Masonry cement for face brick shall be the product of one manufacturer.

   B. Sand shall not be allowed to mix with the earth it rests upon. Store on plastic sheeting or similar material.

   C. Cementeous material shall be stored and protected to prevent damage from weather or condensation.

   D. Temperature: Minimum temperature for applying mortar shall be 40 degrees F. and rising.

   E. Antifreeze liquids, salts, or other substances shall not be used in the mortar to lower freezing point.

2. PRODUCTS:

   A. Masonry cement shall conform to ASTM C-91, Type II, and Federal Specification SS-C-181, Type II, and be waterproofed.

      (1) NOTE: Contractor shall provide written evidence showing that masonry cement used conforms to the water repellance requirements of paragraph 3.2. of Federal Specification SS-C-181 or additional waterproofing shall be added as follows:
      (2) 1 lb. waterproofing per sack of masonry cement.
      (3) Additional waterproofing shall be:
         (a) Omicron by Master Builders.
         (b) Hydrocide Powder by Sonneborn Concrete Products.
         (c) Euco Integral Waterpeller by Euclid Chemical Co.

   B. Portland Cement: ASTM C-150, Type I

   C. Sand: ASTM C-144

   D. Hydrated lime: ASTM C-207

   E. Water: Clean and drinkable.

   F. Mortar coloring by George B. Smith Chemical Works. Color to be selected.

3. EXECUTION:

   A. Mortar shall conform to ASTM C-270, Type S

   B. Ingredients shall be carefully and accurately measured and mixed in a mechanical mixer on the job site.

   C. Mortar shall not be retempered.

   D. Mortar shall be used and placed in final position within 1-1/2 hours after mixing when air temperature is 80 degrees F. or higher. At temperature below 80 degrees F. elapsed time to placement of mortar shall not exceed 2-1/2 hours. Mortar not used within these limits shall be discarded.

   E. Brick joints shall be tinted. Color shall be selected by Architect from prepared samples.

SECTION 4B

CLAY MASONRY UNITS

1. GENERAL:

A. Samples: Four exterior facing units shall be submitted for approval prior to purchase of units. Units shall show surface texture and range of color.

B. Sample Wall: As part of the hollow concrete masonry wall, construct a 4'-0" high X 4'-0" long panel of brick units. Panel shall show coursing, bond, joints, joint coloring, reinforcing, flashing, and weep holes. Upon approval, panel shall serve as a representative of the masonry work to be performed on project.

C. Storage: Clay masonry units shall be placed on level ground and only one cube high. Care shall be exercised to prevent chipping.

2. PRODUCTS:

A. Face units shall conform to ASTM C-216-69, Grade SW, Type FBS Size 2-1/4 inches x 3-3/4 inches x 8 inches. Contractor shall provide a net release sum, excluding sales tax, of ninety-five ($95.00) dollars per thousand, FOB job site.

3. EXECUTION:

A. Joints:

(1) 3 units and 3 mortar joints equals 8 inches.

(2) Vertical joints shall be less than 3/8 inch and shall be of the same width except for inconspicuous variations required to maintain bond.

(3) Joints shall be filled full with mortar and struck off flush with wall surface. When partically set, joint shall be compressed and compacted with tool to form joint shape specified. Horizontal joints shall be formed with tool of a minimum of 24 inches in length.

(4) Vertical joints shall be kept plumb throughout.

(5) Joints in clay masonry units shall be "V" type.

B. Bond: Clay masonry units shall be laid in running bond. Stacked headers and stretchers shall be located as indicated on drawings. Soldier

course at floor lines shall be cut to maintain coursing with concrete masonry units.

C. Laying

(1) Clay masonry units shall be laid damp.

(2) Clay masonry units shall be plumb, level and true to line with accurately spaced courses and reveals.

(3) Units less than 4 inches in length shall not be permitted-

(4) Erect masonry only when temperature is 40 degrees F. and rising.

(5) Fill spaces between metal door frames and masonry with mortar.

(6) Unfinished work shall be stepped back to permit jointing of new work.

(7) In cavity walls, care shall be used in the construction to avoid filling cavity or covering diagonal wall tie with mortar. Failure to exercise due precaution will require demolition and reconstruction of the walls.

(8) Weep holes shall be at bottoms of cavities and top of all openings spaced 24" apart. Weep hole shall be provided by omitting mortar in head joints at specified spacing and location.

(9) At termination of each day's work or when rain is imminent, tops of walls shall be covered with a waterproof membrane secured in place.

(10) Defective work such as chipped units, inconsistent jointing, coursing, shall be removed and reconstructed.

(11) Point up all exposed brickwork, filling holes and joints. Defective joints shall be cut out and repointed.

(12) Cleaning: On completion of the work, exposed brick shall be cleaned with a cleaning solution, removing mortar smears, and then washed down with clean water.

SECTION 4C

HOLLOW CONCRETE MASONRY UNITS

1. GENERAL:

   A. Samples: Submit one exposed type 8" standard unit and one 8" lintel unit for texture approval before purchase of units.

   B. Sample wall: As part of the brick sample wall, construct a 4'-0" X 4'-0" long panel of hollow concrete masonry units on the site. Panel shall show coursing, bond, joints, and reinforcing, and upon approval, shall serve as a representation of the masonry work to be performed on project. Panel shall remain in place undamaged until authorization is given for removal.

   C. Storage: Hollow concrete masonry units shall be stacked on level ground and only one cube high.

   D. Moisture and shrinkage: Moisture content at time of delivery to job shall not exceed 35 percent of the maximum absorption value of the units, when tested as specified in ASTM C-140 and C-427. Maximum linear shrinkage shall be .045 percent when tested in accordance with the "Modified British Method of Test for Drying Shrinkage of Concrete Products."

   E. Damaged and defective units shall not be placed in the wall.

2. PRODUCTS:

   A. Hollow concrete masonry units (concrete block) shall be load bearing and shall conform to ASTM C-90 except that cinders will not be allowed.

      (1) Foundation wall units shall be smooth texture made with gray portland cement, sand, and aggregate, ASTM C-90 Grade U-1.

      (2) Wall units above finish floor shall be rough texture made with gray portland cement, sand, and aggregate.

3. EXECUTION:

   A. Joints:

      (1) 1 unit and 1 mortar joint equals 8" resulting in horizontal joints of 3/8".

      (2) Head joints shall be 3/8".

      (3) Joints shall be filled complete with mortar struck off flush with wall surface and when partially set shall be compressed and compacted with tool to form joint shape specified.

(4) The tool for jointing concrete block shall be a minimum of 24" in length. The standard brick tool is not acceptable.

(5) Joints for exposed units shall be "V" type.

(6) Joints in units to receive glazed wall coating shall be "V" type.

(7) Joints in unexposed units shall be flush type.

B. Bond: Hollow concrete masonry shall be laid in stack bond.

C. Laying:

(1) Units shall be laid plumb, level, and straight. Units shall be dry when laid.

(2) Units with open cells exposed in wall will not be permitted.

(3) Units less than 8" in length shall not be permitted without consultation with the Architect.

(4) Horizontal coursing of units shall be reviewed with the Architect before any units are laid. Coursing shall be symmetrical between windows, doors, doors and windows. 3/4 or 1/2 units shall be used with 16" units to provide horizontal coursing specified.

(5) Bond beams and lintel units shall be filled solid with concrete. Lintels shall be shored for a minimum of 3 days after placing concrete fill.

(6) Fill spaces between metal door frames and masonry full with mortar.

(7) Erect masonry only when temperature is 40° F. and rising. Protect masonry from freezing for 48 hours after being laid.

(8) Provide recesses in walls for built-in or recessed equipment as indicated or specified. Coordinate opening with equipment size.

(9) Spaces to receive glazed wall coating: Outside corners of units shall be bullnosed with a maximum radius of 1-1/2". Extend bullnosed units from floor to ceiling.

(10) At vertical intersection of concrete block walls rake joint back 1/2" and caulk.

(11) Mortar smears: Exercise care to prevent smearing mortar into surface of block.

(12) Cutting of hollow concrete masonry units shall be done with masonry saws. Openings for electrical outlets, sleeves, etc., shall be saw cut.

(13) Unfinished work shall be stepped back to permit jointing of new work.

(14) At termination of each day's work, cover tops of walls exposed to weather with waterproof membrane secured in place.

(15) Cleaning: Units shall be cleaned of mortar smears and rough joints and left ready to paint.

(16) Defective work such as cracked or chipped units, inconsistent coursing or jointing shall be removed and reconstructed.

SECTION 4D

MASONRY REINFORCEMENT

1. GENERAL:

   A. Finish shall be regular mill, galvanized.

2. PRODUCTS:

   A. Cavity wall ties shall be adjustable 2 piece, rectangular type, 3/16 inch diameter steel wire.
      (1) No. 8A by Duro-wal Products
      (2) No. 800 by Hohmann and Barnard, Inc.

   B. Single wythe block ties shall be 2 parallel 9 gauge deformed steel side rods welded to 9 gauge continuous diagonal cross rod forming a truss design. Size suited to wall thickness.

      (1) Dur-o-wal truss type by Dur-o-wal Products.
      (2) Blok-trus by AA Wire Products Co.
      (3) Lox-all truss type by Cumberland Corp.

   C. Hardware cloth, galvanized, 2" narrower than width of wall. 24" in length.

3. EXECUTION:

   A. Adjustable cavity wall ties shall be placed at 16 inches o.c. vertically in alternate courses with truss type ties in concrete block wythe of cavity wall. Adjustable ties shall be spaced 24" o.c. horizontally. Eyelet of eye section shall project through rigid wall insulation.

   B. Single wythe wall ties shall be placed at 16" o.c. vertically starting 8" above finish floor and in joint 8" below finish floor. Lap ties 6" at all splices.

   C. Exterior cavity wall corner joint reinforcing shall be fabricated on job by cutting inside rod and bending 90°. Corner reinforcing shall lap straight wall runs 24" minimum each direction from corner.

   D. Masonry partitions shall be tied to masonry walls by 24" lengths of hardware cloth at 16" o.c. vertically. Start 8" above finish floor.

   E. In addition to other wall ties specified, provide wall ties in second joint above lintel course over interior and exterior door openings. Extend wall ties 24" minimum beyond each side of masonry openings.

   F. Failure to provide masonry reinforcing as herein specified shall result in the demolition and reconstruction of the wall.

SECTION 5A

STRUCTURAL STEEL

1. GENERAL:

   A. Reference Standards: Incorporated herein by reference and made a part hereof are applicable standards of the American Institute of Steel Construction, including the Specification for the Design, Fabrication and Erection of Structural Steel for Buildings, Seventh Edition, and the AWS Structural Welding Code, 1972, AWS D1.1-72.

   B. Shop Drawings:

      (1) Submit in 5 copies and obtain final corrections from review prior to fabrication. Review shall not relieve Contractor from responsibility to comply with requirements of contract documents.
      (2) Use standard AWS symbols at welded connections, and furnish large scale details of both shop and field welded joints to show edge preparation, size, length and location of welds.
      (3) Checking: The Contractor shall require that the material supplier submit a signed written statement, in conjunction with the shop drawing submittal, that the drawings have been checked for compliance with the contract requirements. Such checking shall include but not be limited to size, shape, length, quantity and location. The checking shall have been performed by a person or persons regularly engaged in drawing checking and shall not be the person or persons who prepared the drawings.

   C. Cooperation With Other Trades: Do all punching and drilling of structural steel required for attachment thereto of other materials. Furnish instructions and templates to insure setting of bolts, anchors, and bearing plates securing structural steel.

2. PRODUCTS:

   A. Steel shall conform to ASTM A-36.

   B. Bolts and washers connecting steel to steel shall conform to ASTM A-325.

   C. Paint shall conform to SSPC Paint Specification No. 13, and shall be red.

   D. Grout shall be pre-mixed, non-shrink EMBECO, manufactured by Master Builders Company; Sonneborn Building Products' Ferrolith G, or W. R. Meadows Company's Sealtight V-3.

   E. Electrodes shall conform to E70XX.

3. EXECUTION:

A. Fabrication:

(1) All members shall be accurately made so that when assembled the parts shall come into close contact without shimming and distortion and shall be free from twists, kinks, buckles or open joints. Use no shop splice or connection, welded or otherwise, which has not been detailed on shop drawings and approved by the Architect.

(2) All welders shall be certified under the AWS Code for welding performed in the particular position. Prior to commencement of work, furnish names and welding certificates of all shop and field welders performing work hereunder.

(3) Loose mill scale, rust, dirt, slag, oil, grease, and other foreign matter shall be removed completely by cleaning in accordance with Standard SP-3-63 of Steel Structures Painting Council. Cleaning shall be done immediately prior to painting. Prime all steel, unless noted, with one shop coat to a dry film thickness of at least 2 mils, applied in strict accord with SSPC-PA 1-64. Do not apply paint to surfaces within 2" of joints to be field welded.

B. Connections:

(1) Unless noted otherwise, shop connections shall be welded and field connections shall be bolted.

(2) Connection angles shall conform to applicable requirements of Framed Beam Connections, Table 3, AISC Manual, Seventh Edition, and shall be maximum length for beam of a given depth as indicated in Table 1, above Reference, unless shown or noted otherwise on contract drawings. Thickness shall be not less than 3/8".

(3) Conform to the Specification for Structural Joints Using ASTM A-325 or A-490 Bolts, dated September 1, 1966. Connections shall be bearing type with threads excluded from the shear planes. Bolts shall be 3/4" diameter unless noted. Tightening of bolts shall be done by the Turn-of-the-Nut Method. Contractor shall give evidence of a thorough knowledge of this method prior to any erection of steel.

(4) Full penetration, full strength welds shall be in strict accord with details shown in AISC Manual. Provide runout plates, backing bars, and back-gouge initial passes where backing bars are omitted.

C. Erection:

(1) Set all work in accurate alignment and secure in place. Support column and beam bases on shims, and grout under bases solid with non-shrink grout, unless shown otherwise

on contract drawings. Include falsework, staging, and equipment. Provide stays and braces to hold structural steel in position until permanently secured. Field errors will not be repaired by burning unless specifically authorized in writing by the Architect.

(2) After erection, apply field coat of same materials as shop coat to bolt heads, abraded areas, and surfaces damaged by welding or weathering. (Note shop prime coat is for moderate exposure.)

SECTION 5B

STEEL JOIST

1. GENERAL:

A. Reference Standard: Incorporated herein is the Standard Specification for Open Web Steel Joist, J-Series and LJ Series, adopted by the AISC and the SJI, 1972, and the AWS Structural Welding Code, 1972, AWS D1.1-72.

B. Shop Drawings:

(1) Submit in 5 copies and obtain final corrections from review prior to fabrication. Review shall not relieve contractor from Responsibility to comply with requirements of contract documents.

(2) Checking: The Contractor shall require that the material supplier submit a signed written statement, in conjunction with the shop drawing submittal, that the drawings have been checked for compliance with the contract requirements. Such checking shall include but not be limited to size, shape, length, quantity, and location. The checking shall have been performed by a person or persons regularly engaged in drawing checking, and shall not be the person or persons who prepared the drawings.

2. PRODUCTS:

A. Steel for joist shall have a yield point of 36,000 psi.

B. All paint shall be as noted in Structural Steel section, except that paint conforming to SSPC 15-68T, Type 1 (red oxide) is acceptable. Exposed joist shall be suitable for finish painting and shall be free of sags, runs, and other unsightly applications.

C. Joist shall be "J" and "LJ" series, as shown on drawings.

D. Bridging for "J" series joist shall be horizontal members. Bridging for "LJ" series joist shall be diagonal members. Size, spacing and attachment of bridging shall conform to requirements of the SJI unless noted. All bridging shall be welded. At ends of bridging lines add diagonal angles (at J series) or horizontal angles (at LJ series) between last two joist or between joist and wall (see details). Added angles to be of size shown on drawings.

E. Accessories shall include wall anchors and extended top and bottom chords.

F. Bearing shall be standard unless noted. "LJ" series to be bottom bearings.

3. EXECUTION:

A. Design shall be in accord with SJI requirements.

B. Workmanship: Shall be in strict accord with SJI, AISC, and AWS requirements, unless noted. Un-reinforced shop splices shall be limited to top chord and web members. Bottom chord splices shall be reinforced by adding and developing not less than 35% of the spliced chord member area. Reinforced and un-reinforced splices shall have complete penetration butt welds in accord with referenced specification paragraph 4.5(c), and members shall be carefully and accurately aligned. No chord member shall be spliced in more than one place in any joist.

C. Erection: Raise joist by hooking at third points. Secure at bearing and install bridging before applying construction loads. Weld joist at bearings with 3/16-inch fillet welds on each side. Length of each weld shall be 1-1/2" for each 25 feet of span or fraction thereof.

D. At all locations where joist are located within 12" of column centerline, provide two 9/16" diameter holes, staggered, in beam flange, and two 9/16" x 3/4" slotted holes in joist bearing plate to receive one 1/2" diameter bolt in each end of each joist. This is a temporary connection. It does not take the place of any other bracing or connections required by the contract drawings or specifications.

SECTION 5C

MISCELLANEOUS METALS

1. GENERAL:

   A. Submittal: Provide 5 copies of shop drawings for boot racks (space 111), metal frame shelves (space 113), hose rack (space 112), expansion joint covers, handrails and miscellaneous shapes. Drawings shall clearly show details of fabrication, installation and be fully dimensioned.

   B. Reference standard: American Society for Testing and Materials (ASTM).

   C. Shop priming: After fabrication all ferrous items shall be cleaned and given one coat of rust inhibitive primer.

2. PRODUCTS:

   A. Steel tubing: ASTM A-36.

   B. Steel bars: ASTM A-36.

   C. Steel plate and angles: ASTM A-36.

   D. Bolts: ASTM A-307.

   E. Expanded metal lath: 3-1/4" No. 9, flattened expanded lath, 1.71 lbs. per sq. ft. by Penn Metal Co., Inc.

   F. Insect screen: 18 x 14 mesh, .011 diameter aluminum wire.

   G. Expansion joint covers (EJC - See Dwg. A-3)
      (1) Type A - Floor to Floor (Plain Plate)
          (a) Type C-40 by Metalines Inc.
          (b) Type D-400 by Architectural Art Mfg. Co.
          (c) Type 210P by Construction Specialties Co.

      (2) Type B - Floor to Wall (Plain Plate)
          (a) Type WL-40 by Metalines Inc.
          (b) Type D-404 by Architectural Art Mfg. Co.
          (c) Type 210W by Construction Specialties Co.

   H. Hose rack brackets (space 112) Lok-Tite as manufactured by W. B. Manufacturing Co., 157 N. Waco, Wichita, Kansas, Telephone 316-263-7543.

3. EXECUTION:

   A. Boot racks, and metal frame shelves shall be fabricated as detailed and installed at locations indicated.

   B. Expansion joint covers shall be installed as indicated.

   C. Handrail shall be fabricated as detailed and installed at location indicated.

SECTION 5D

METAL GRATE AND FRAME

1. GENERAL:

   A. Submittal: Provide 5 copies of shop drawings for metal grate and frame. Drawing shall show dimensions and installation details.

   B. Reference standard: ASTM A-48-64, minimum class 30 iron.

2. PRODUCTS:

   A. Metal grate and frame:

      (1) Neehah Foundry Company No. R-1818
      (2) Flockhart Foundry Company No. Type 309-C-28200
      (3) McKinley Iron Works Type KM 24-24 w/KGM 24-24 grate

3. EXECUTION:

   A. Metal grate and frame shall be installed at locations shown.

   B. Prior to installation of catch basin and grates, Contractor shall establish invert of pipes and elevation of top of top of grates and notify the Architect.

SECTION 6A

ROUGH CARPENTRY

1. GENERAL:

   A. Reference standards:

      (1) Southern Pine Inspection Bureau (SPIB).
      (2) American Wood Preservers Institute (AWPI).
      (3) Douglas Fir Plywood Association (DFPA).

   B. Storage: Materials shall be stored in a dry, clean, and ventilated area.

2. PRODUCTS:

   A. Roof curbs, blocking, bases, plates, studs, headers, bracing, and miscellaneous blocking: Grade marked No. 2 or better Southern Yellow Pine. Moisture content 19% maximum.

   B. Nails: Standard framing type, size to suit job condition.

   C. Wall insulation: (Thickness: 1 inch)

      (1) Styrofoam FR by Dow Chemical Co.
      (2) Dyfoam by W. R. Grace Co.
      (3) Material shall be self-extinguishing.

   D. Wood preservation treatment shall conform to AWPI standards dated September, 1969, as follows:

      (1) Normal exposure - LP 2.
      (2) Severe exposure - LP 22.
      (3) Treated lumber shall bear an identification mark denoting conformance with reference standard and standard under which treated.
      (4) Products by Koppers Co. and Osmose are acceptable.

3. EXECUTION:

   A. Roof curbs, blocking, bases, plates, headers, bracing, and miscellaneous blocking shall be accurately cut and fitted.

   B. Wood studs shall be cut and fitted to provide a plumb surface to which a finish can be applied. A minimum of 4 nails shall be applied at each framing connection.

   C. Wall insulations shall be installed in cavity space of all exterior walls. Insulation shall be placed between horizontal runs of wall ties. Extend from finish floor to top of masonry.

   D. Wood treated with preservative shall be as follows:

      (1) Normal exposure: Plates, headers, bracing, miscellaneous blocking, and furring in contact with concrete block only or steel members below roof line.
      (2) Severe exposure: Eave nailers, roof curbs, blocking, bases, and miscellaneous blocking in contact with concrete or ground.

SECTION 6B

BATT INSULATION

1. GENERAL:

   A. Storage: Material shall be protected against water damage.

2. PRODUCTS:

   A. Batt insulation shall be six inches thick (6") mineral wool batts or rolls with foil faces vapor barrier. Width shall be 24" nominal.
      (1) Thermafiber Regular Blanket by USG
      (2) Foil-faced insulation by Owens-Corning Fiberglas
      (3) Foil-faced insulation by Rockwool Industries

3. EXECUTION:

   A. Location of insulation provide over all heated spaces with suspended ceilings (plaster and acoustical tile) unless otherwise noted or detailed. Omit over ceiling in spaces on Ground Floor Level.

   B. Placement of insulation: Install so as to leave no open areas. Where insulation abuts vertical surface turn up insulation 6 inches. Vapor barrier side of insulation shall be placed against ceiling. Abut insulation to all sides of recessed troffer light fixtures.

SECTION 6C

FINISH CARPENTRY, MILLWORK

1. GENERAL:

   A. Reference standards:
      (1) Southern Pine Inspection Bureau (SPIB).
      (2) Douglas Fir Plywood Association (DFPA).

   B. Materials shall be stored in a dry area and protected against warpage.

   C. Base cabinets, wall cabinets and counter tops in spaces 106, 124, 125 002 and 010 are specified elsewhere.

   D. Moisture content of wood: 19%.

   E. Plywood shall have wood veneer core. Particle board and fiberboard cores not acceptable.

2. PRODUCTS:

   A. Plywood shelving (painted):
      Spaces 103, 107, 113, 116, 117, 121, 126, 127, 003, 005, 006, 008, 017, 019, 023, 024: A2 grade gum or A2 grade unselect birch, interior type.

   B. Shelf framing (Painted):
      Spaces 103, 107, 113, 116, 121, 003, 005, 008, 017, 019: 1 x 2 verticals, selected kiln dried Douglas Fir; C or better, 1 x 4 cleats and supports, kiln dried Southern Yellow Pine No. 1.

   C. Coat and hat strips (Space 113) and miscellaneous trim:
      Selected kiln dried Douglas Fir, C or better.

   D. Miscellaneous wood framing (studs, furring, bracing, etc.):
      Southern Yellow Pine No. 2 (treated).

   E. Prefinished paneling, 1/4" thick, (spaces 020, 021, 022, 025):
      Contractor shall include in the base bid the sum of twenty-four dollars ($24.00) per 4' x 8' sheet. This allowance shall not include installation or delivery charges, overhead, profit, or cost of matching mouldings and trim. Paneling shall be selected by Architect.

   F. Gypsum board, metal studs and accessories:
      (1) Gypsum board: 1/2" thick, tapered edge.
      (2) Joint tape: Perforated.
      (3) Casing bead: Galvanized, type for mudding.
      (4) Corner bead: Galvanized type for mudding.

(5) Joint cement.
(6) Manufacturers:
    (a) National Gypsum
    (b) U. S. Gypsum
    (c) Georgia Pacific

3. EXECUTION:

A. Millwork shall conform to design and details indicated. Finish shall be smooth and free from machine or tool marks. Nail holes shall be set to receive putty.

B. Shelving shall be sanded and ready for finish. Provide hardwood edge bands on all shelves.

C. Wood shelf framing shall be erected straight, level, and plumb. Secure to walls with 1/4" diagonal toggle bolts at 3 foot o.c. horizontally.

D. Gypsum board (space 111): 1/2 inch thick shall be secured to studs. Tape, mud and sand joints for a paint finish.

E. Wood furring (spaces 020, 021, 022, 025) shall be treated 1 x 4, spaced 16" o.c. horizontally. Secure to concrete block with 1/4" ϕ toggle bolts spaced 24" o.c. vertically. Provide horizontal furring at base, 4' and 8' above floor and at ceiling line. Paneling shall be secured to wood furring with color matched nailes suited for the purpose and drywall adhesive. Adhesive shall be applied to all wood furring.

SECTION 6D

CABINETWORK

1. GENERAL:

A. Submittal: Furnish 5 copies of shop drawings indicating sizes, dimensions, material grades, species, and construction details.

B. Finish: Stain finish for cabinetwork covered in Section 9E.

C. Reference standards: Douglas Fir Plywood Association (DFPA).

D. Plywood shall have wood veneer core. Particleboard and fiberboard cores not acceptable.

2. PRODUCTS:

A. Cabinetwork:

(1) Base cabinets (Stain finish):
- (a) Solid facing members, unselect northern birch.
- (b) Finished end, sides, A2 unselect birch.
- (c) Doors, drawer fronts, A2 unselect birch.
- (d) Divider and shelf, A2 unselect birch
- (e) Back, A2 unselect birch
- (f) Drawer sides and back, sound solid stock lumber.
- (g) Drawer bottom, AD grade Douglas Fir
- (h) Bottom A2 unselect birch.

(2) Wall cabinets (Stain finish):
- (a) Solid facing member, unselect northern birch.
- (b) Finished ends, sides, A2 unselect birch.
- (c) Shelf A2 unselect birch.
- (d) Bottom, A2 unselect birch
- (e) Doors, A2 unselect birch

(3) Counters, Shelf (Space 106, 124, 125,010) (
- (a) Top, CD grade Douglas fir.
- (b) Splash, front edge, sound solid stock lumber
- (c) Covering, laminated plastic.

B. Laminated plastic: Color to be selected by Architect.

(1) Pionite by Pioneer Plastics Corp.
(2) Formica by Formica Corp.
(3) Micarta by Westinghouse Corp.
(4) Consoweld by Consoweld Corp.
(5) Textolite by General Electric Co.

C. Hardware: See Section 8F.

3. EXECUTION:

A. Cabinetwork shall be constructed to conform to the shapes and sizes shown.

B. Major structural joints of facing members shall be glued mortise and tenon or dowel joints. Butt and nailed joints not acceptable.

C. Edge bands on shelving shall be glued. Staples not acceptable. Nail holes shall be minimized.

D. Exposed surfaces shall be free of machine marks and evenly sanded for finish.

E. Drawer bottoms shall be grooved into sides, back, and front.

F. Where cabinetwork abuts walls, scribe to fit surface.

G. Sinks furnished elsewhere shall be fitted in tops at locations shown.

H. Nails shall be set and left ready to receive putty to match stain finish.

I. Backsplashes shall be set in continuous bed of exterior type caulk.

J. Cabinetwork shall be erected and placed level and plumb. Secure to walls as indicated.

SECTION 7A

BUILT-UP ROOFING

1. GENERAL:

A. Submittal: Furnish 5 copies of roofing manufacturers written instructions for installation of built-up roofing, base flashing at roof openings and parapet flashing.

B. Bonds: Provide 20 year roofing bond and 20 year flashing endorsement.

C. Bitumen leakage: Contractor shall permanently stop bitumen from running through all roof openings (roof curbs, metal sleeves, etc.).

2. PRODUCTS:

A. Base sheet: Asbestos felt reinforced with glass fiber strands, asphalt saturated and coated with mineral stabilized asphalt coating.

(1) No. 43 Asbestos Base Sheet by Celotex Corp.
(2) Asbestos Base Sheet by GAF Corp.
(3) Asbestos Base Sheet byJohns-Manville

B. Roofing felts: Perforated asbestos felt, saturated with refined asphalt.

(1) No. 15 Asbestos Felt (perforated) by Celotex Corp.
(2) No. 15 Perforated Asbestos Felt by GAF Corp.
(3) No. 15 Asbestos Finishing Felt (perforated) by Johns-Manville

C. Steep asphalt:

(1) Crystal Steep Asphalt by Celotex Corp.
(2) Steep Asphalt by GAF Corp.
(3) Steep Asphalt by Johns-Manville

D. Performed cants: Minimum 1 inch thick asphalt impregnated fiberboard. Products by Celotex Corp, GAF Corp., and Johns-Manville are acceptable.

E. Roofing cement:

(1) Elastigum by Celotex Corp.
(2) Products by GAF Corp. and Johns-Manville are acceptable.

F. Vinyl Flashing: 20 mil. thick flexible sheet polyvinyl chloride minimum 9 inches wide.

(1) Wascoseal Type 20 by Wasco Products, Inc.
(2) ViSeal Type 20 by AFCO Products, Inc.
(3) Nervastral H-D 20 by Rubber and Plastics Compound Co., Inc.

G. Joint adhesive (vinyl flashing);

(1) Type R by Wasco Products, Inc.
(2) Vi-Seal Adhesive by AFCO Products, Inc.
(3) Nervaplast by Rubber and Plastics Compound Co., Inc.

H. Base and parapet flashing felts: 15 pound perforated asphalt saturated asbestos felt.

(1) No. 15 Perforated Asphalt Saturated Asbestos Felt by Celotex Corp.
(2) No. 15 Perforated Asphalt Saturated Asbestos Felt by GAF Corp.
(3) No. 15 Asbestos Finishing Felt by Johns-Manville

I. Base Flashing cap sheet: Glass fiber reinforced asbestos felt saturated and coated with asphalt.

(1) AB-20 Flashing Sheet by Celotex Corp.
(2) Asbestos Combination Flashing Sheet by GAF Corp.
(3) Asbestos Base Flashing by Johns-Manville

J. Nails (Base Sheet): Zonotite by W. R. Grace Co.

K. Roof aggregate: ASTM D-1863.

3. EXECUTION:

A. Preparation: Surface to receive roofing shall be clean and free from foreign objects.

B. Built-up roofing shall be a three part system as follows:

(1) 1 Layer base sheet
(2) 3 Layers roofing felts.
(3) Surface material (roof aggregate).

C. Roofing shall be installed in strict accordance with the following 1977 Manufacturer's Specifications.

(1) Specification No. 441-W by Celotex Corp.
(2) Specification No. 212-N by GAF Corp.
(3) Specification No. 600 by Johns-Manville (Modified)

D. Base flashing (roof openings with wood and metal curbs, expansion joint curbs) shall be a two part system as follows:

(1) 1 layer base flashing felt.
(2) 1 layer base flashing cap sheet.
(3) Aluminum coating.

E. Base flashing shall be installed in strict accordance with the following 1977 Manufacturer's Specifications.

(1) Specification No. AB-20 by Celotex Corp.
(2) Specification No. 6 by GAF Corp.
(3) Specification No. FE-1 by Johns-Manville

F. Parapet flashing shall be installed in strict accordance with the following 1977 manufacturers Specifications.

(1) Specification No. FE-3 by Johns-Manville
(2) Specification No. AB-20 U/O by Celotex Corp.

G. Performed cant strip: Install to form a 45 degree slope at locations where roofing abuts a vertical wood or metal curb. Apply in a mopping of steep asphalt.

H. Vinyl Flashing shall be installed at roof expansion joint as indicated. Lap joints 6" and seal with adhesive.

I. Base sheet over concrete roof fill shall be nailed along the lap at 9 inches maximum and stagger-nailed through center of sheet at 18 inch intervals. Nail with Zonotite Nails.

J. Base and Parpet flashing shall be aluminum coated.

SECTION 7B

SHEET METAL WORK

1. GENERAL:

A. Submittal: Furnish 5 copies of shop drawings before fabrication. Indicate each profile of sheet metal to be used, gauge, material, anchorage methods, and expansion joints. Drawings shall be one quarter full size.

2. PRODUCTS:

A. Copper shall be sixteen (16) ounce and conform to ASTM B-152.

B. Solder shall conform to Federal Specification QQ-S-571, Class A.

C. Metal Cap flashing shall be formed copper.

D. Roof expansion joint flashing shall be formed copper.

E. Cleat shall be 2" wide, formed copper.

F. Gravity vents shall be low profile type, .063 aluminum. Unit shall be reinforced with extruded aluminum angles and equipped with bird screen. Joints shall be heliarc welded and caulked to be waterproof. Throat size shall be 16" square. Unit shall have integral cap flashings for curb mounting. Exposed fasteners shall be tamper proof.

G. Caulk shall be acrylic terpolymer:

(1) Mono-lasto-meric by Tremco.
(2) One-part Acrylic by Dick-Armstrong-Pontius.
(3) 60# Unicrylic by Pecora Chemical Corp.

3. EXECUTION:

A. Fabrication:

(1) Items of sheet metal work shall be fabricated to the shape and size shown or specified.

(2) Metal cap flashing and expansion joint flashing shall be provided in 10' lengths.

(3) Joints in copper work shall be soldered as indicated.

B. Installation:

(1) Metal cleats for cap flashing shall be provided at 24" o.c.

(2) Metal cap flashing shall be installed as indicated and secured to masonry with nylon tap-ins with cadium plate drive pins spaced at 12" o.c. Lap joints 6". Provide one 1/4" expansion joint in center of total length and install an 8" wide cover of same shape. Extend flashing 6 inches beyond face of lower precast concrete panel.

(3) Expansion joint flashing shall be installed under metal cap flashing. Secure top edge with nylon top-ins at 32 inches o.c. Secure bottom edge with cleats. Joints shall be soldered. Provide one expansion joint in center of total length and install an 8 inch wide cover secured on one side only.

SECTION 7C

DAMPPROOFING

1. GENERAL:

   A. Submittal: Furnish 12 inch x 12 inch sample of flexible flashing with attached description indicating thickness, manufacturer, and copy of instructions for use of adhesive. Furnish 5 copies of manufacturers literature for cavity dampproofing.

2. PRODUCTS:

   A. Flexible flashing shall be 20 mils thickness.
      (1) Type 20 Wascoseal by Wasco Products, Inc.
      (2) H-D Nevastral by Rubber and Plastics Compound Co., Inc.
      (3) Type 20 Vi-seal by AFCO Products, Inc.

   B. Adhesive:
      (1) Type R by Wasco Products, Inc.
      (2) Nerva-plast by Rubber and Plastics Compound Co., Inc.
      (3) Vi-Seal adhesive by AFCO Products, Inc.

   C. Cavity Dampproofing: Shall be solvent base asphalt compounds with asbestos fibers.
      (1) Eternaflex No. 2 by Gibson-Homans Co.
      (2) Hydrocide Semi-Mastic by Sonneborn

3. EXECUTION:

   A. Flexible flashing over openings (Exterior windows, doors and grilles) shall be one piece without splices. Extend minimum of 8 inches beyond each end of opening.

   B. Flexible flashing at base of walls shall be lapped a minimum of 6 inches at splices and sealed with adhesive.

   C. Flexible flashing shall be extended into joint of masonry and terminated one-half inch from exposed face of masonry.

   D. Cavity Dampproofing:
      (1) Apply dampproofing on all cavity faces of concrete block on exterior walls prior to laying brick wythe.
      (2) Extend dampproofing from 8 inches below finish floor line to top of exterior wall.
      (3) Protect exposed masonry wall ties from coating of dampproofing.

SECTION 7D

CAULK

1. GENERAL:

A. Submittal: Furnish one tube of each type caulk to be used and 6" sample of joint backing.

B. Temperature: Caulk shall not be applied when surrounding air is below 32 degrees and falling.

2. PRODUCTS:

A. Exterior caulk:

(1) Mono-lasto-meric by Tremco Manufacturing Co.
(2) 60# Unicrylic by Pecora Chemical Corp.
(3) Acrylic Terpolymer by Dick-Armstrong-Pontius.
(4) Colors shall be selected by Architect

B. Interior caulk:

(1) Latex by Dick-Armstrong-Pontius.
(2) AC-20 by Pecora Chemical Corp.
(3) Latex by Gibson-Homans.

C. Joint backing shall be polyethylene foam.

(1) Ethafoam SB by Dow Chemical Co.
(2) Minicel by Products Research & Chemical Corp.
(3) Size: Backing rod shall be 1/8" minimum larger than width of joint to be caulked.

3. EXECUTION:

A. Preparation: Joints to be caulked shall be cleaned and dried. Masking of adjacent surfaces shall be used to obtain a straight caulking line.

B. Application: Caulking shall be applied with pressure of hand flow equipment. Joints shall be uniform, full, and non-sagging.

C. Curing: Caulked joints shall not be touched, washed, painted, or otherwise disturbed for 48 hours after installation.

D. Caulk: All Joints around door and window frames.

E. Caulk exposed joints at junction of lavatories and urinals with wall.

F. Caulk vertical joint of intersecting concrete block walls and concrete block partitions in finished and unfinished areas.

G. In addition to joints specified herein, caulk joints indicated on drawings.

H. Provide joint backing at all joints of clay masonry and concrete masonry expansion joints and control joints, and elsewhere to provide a secure caulking base.

I. Prior to application of parapet flashing, caulk vertical joints in fascia panels. Extend caulking across top of fascia panel, down outside face and 1/2" past face of brick.

SECTION 7E

WATERPROOFING

1. GENERAL:

A. Submittal:

(1) Under slab waterproofing: Furnish two copies of manufacturers instructions for use.

(2) Below grade wall waterproofing: Furnish two copies of manufacturers instructions for use.

B. Installation instructions: Furnish two copies each of manufacturers written installation instructions to job site prior to commencement of waterproofing.

2. PRODUCTS:

A. Under slab waterproofing: Shall consist of a layer of 15 lb. felts lapped 4 inches minimum and sprayed on mastic.

(1) Mastic:
(a) Eternaflex No. 3 by Gibson-Homans Company
(b) Hydrocide by Sonneborn
(c) Dehydratine No. 10 by A. C. Horn

(2) Felt: 15 lb. asphalt saturated.

B. Below grade wall waterproofing: Shall consist of glass cloth membrane embedded in mastic and covered with protective layer of felt.

(1) Mastic:
(a) Eternaflex No. 3 by Gibson-Homans Company
(b) Hydrocide by Sonneborn
(c) Dehydratine No. 10 by A. C. Horn

(2) Glass cloth: Shall be asphalt treated type. 20 by 20 mesh.

(3) Felt: Shall be 30 lb. asphalt impregnated type.

3. EXECUTION:

A. Under slab waterproofing: Fill shall be spread level and compacted to meet requirements of Section 2A Earthwork. Place a layer of 15 lb. asphalt felt on compacted fill, lapping 4 inches. Then spray on mastic at a rate of 5 gallons per hundred square feet, with a minimum of 65 lbs. pressure, through an air-internal-mix-type gun. While still tacky, cover mastic wtih a layer of 15 lb. perforated asphalt felt, lapping 4 inches. This felt shall be placed perpendicular to the base felt.

Extend waterproofing over exterior footing to outer edge. No wood stakes shall be used to support forms and screeds in areas where under-slab treatment is made. If such supports are needed, they shall be permanently installed iron or steel pins. When using wheelbarrows to pour concrete

over under-slab treatment, runways shall be installed and used so as to prevent breaching of the membrane.

B. Below grade wall waterproofing: Remove fins, loose or projecting materials point up intertices with cement mortar, clean thoroughly to remove dirt, oil, and other foreign matter. Mastic shall be applied to walls and footings with an air-internal-mix-type gun, at a rate of four gallons per 100 square feet. While the mastic is still tacky, embed a membrane of asphalt treated glass cloth. Lap all joints of the membrane 4 inches, buttering laps so that no membrane touches membrane. Extend the treatment from bottom of footing to 4" below grade. No single piece of membrane shall be longer than 10 feet. Then apply another coat of mastic at the rate of 4 gallons per 100 square feet. While still tacky, apply a layer of 30 lb. felt to protect against backfill.

SECTION 8A

HOLLOW METAL FRAMES

1. GENERAL:

   A. Submittal: Furnish 5 copies of shop drawings indicating quantity, dimensions, cut-outs, profiles, gauges and anchorage.

   B. Drilling, tapping, cut-outs, and reinforcing shall be performed at factory.

   C. Shop priming: Steel frames shall be cleaned, bonderized, and given one coat of baked-on metallic primer. Removeable metal stops and metal frames shall be primed individually so that all metal surfaces are covered with primer.

   D. Temporary spreaders shall be provided at bottoms of unsupported frames for shipment and not removed until frame is secured in position.

   E. Storage: Metal frames shall be stored so as not to be in contact with the ground and shall be protected against surface damage. Scratches or other abrasions shall be touched up with rust inhibitive primer before application of finish.

2. PRODUCTS:

   A. Standard Frames: (Engineered)

      (1) Materials:

         (a) Frames shall be 16 gauge.

         (b) Hinge reinforcing, 7 gauge, 1-1/2" x 10", other reinforcing 10 gauge.

         (c) Cover boxes, 26 gauge galvanized steel.

         (d) Floor anchors, 12 gauge clip angle.

         (e) Jamb anchors, 14 gauge currugated, 2" x 10".

         (f) Removeable stop, 16 gauge in single lengths.

      (2) Fabrication:

         (a) Metal frames shall be type, profile, and size indicated. Frames shall be formed or rolled to shapes specified and joints welded and ground smooth. No screws shall be exposed.

         (b) All reinforcing shall be welded in place.

(c) Frames shall have integral stops and in addition provided with removeable metal stops. Secure stops with counter sunk zinc plated screws.

(d) Jamb anchors shall be adjustable type. Provide 4 anchors per jamb for frames over 6'-8" high. Other frames shall have 3 anchors per jamb.

(e) At floor provide metal clip angle welded to bottom of each jamb with provision for vertical adjustment.

(f) Punch door frames for silencers.

(g) Distance from top of hinge cut-out to head of door frame and from bottom of hinge cut-out to bottom of door frame shall be consistent on all door frames.

(h) Provide label frames at locations indicated. Frames shall be of class indicated and carry U.L. label.

(i) Knock-down frames will not be acceptable.

(3) Manufacturers:

(a) Habersham Metal Products
(b) Bymoco
(c) Trussbilt
(d) Fire Door Corp.
(e) American Metal Works
(f) Builders Manufacturing Company
(g) Williamsburg Steel Products
(h) Steelcraft Manufacturing Company
(i) Amweld
(j) Fenestra
(k) Republic Steel

3. EXECUTION:

A. Metal frames shall be installed true to line, level, plumb, and specified anchorage at jambs and floors.

B. Metal frames shall be rigidly held in place during masonry laying operation.

C. Bent and dented frames will not be acceptable.

SECTION 8B

HOLLOW METAL DOORS

1. GENERAL:

   a. Submittal: Furnish 5 copies of shop drawings indicating type, quantity, dimensions, cut-outs, material gauges, and details of construction.

   b. Hardware and templates shall be coordianted with door manufacturer.

   c. Drilling, tapping, and reinforcing for hardware shall be performed at factory.

   d. Shop priming: Metal doors shall be cleaned, phosphate coated and primed with 1 coat of baked on primer.

   e. Storage: Metal doors shall be stored in upright position under cover to prevent distortion and rust.

2. PRODUCTS:

   a. Materials:

      (1) Panels: 16 gauge, cold rolled, leveled sheet steel.
      (2) Interior structure: 16 gauge, cold rolled channels.
      (3) Reinforcement:
          (a) Hinges: 7 gauge steel.
          (b) Lock face, closer, flush bolts, and surface mounted hardware: 10 gauge.
      (4) Louvers: 20 gauge, cold rolled steel.

   b. Fabrication:

      (1) Metal doors shall be type and size shown, 1-3/4" thick, full flush, fully welded seamless construction with no visible seams or joints.
      (2) Top and bottom and sides of all doors shall be closed by a continuous 16 gauge steel channel.
      (3) Doors shall be sound-deadened and insulated for full height.
      (4) Edge clearances:
          (a) Between doors and frames, at head and jambs, 1/8".
          (b) Between edges of pairs of doors, 1/8".
      (5) Face sheets shall be attached to grid structure with multiple projection welds.
      (6) Removeable stops shall be 16 gauge.
      (7) Metal louvered doors shall be type shown and shall be same construction as flush hollow metal doors with stationary metal louvers of the welded blade type construction, sightproof. See door schedule for minimum free area required for louvers. Louvers pressed into face sheets will not be permitted.
      (8) Finish: After fabrication, tool marks and surface imperfections shall be dressed, filled, and sanded to provide smooth and level faces and edges.

c. Manufacturers:

(1) Fenestra.
(2) Amweld.
(3) Steelcraft.
(4) Williamsburg Steel Products.
(5) Fire Door Corp.
(6) Habersham Metal Products.

3. EXECUTION:

a. Metal doors shall be hung plumb, level, and rigid.

b. Hardware shall be field applied in accordance with hardware schedule.

SECTION 8C

WOOD DOORS

1. GENERAL:

   A. Submittals: Furnish 5 copies of shop drawings indicating size, types, quantities and cut-outs.

   B. Storage: Wood doors shall be on the job in a dry area and supported to protect against warpage and surface damage.

   C. Standards: Wood doors shall meet the requirements of the National Woodwork Manufacturers' Association I.S. I-69, Hardwood Veneered Flush Door, paragraph 4.2.1.1. and Federal Specification LLLD-581, Type 1.

2. PRODUCTS:

   A. Solid core doors shall be particle board type.

      (1) Core: Particle board, 3 ply with min. density of 25 lbs/cu. ft. in accordance with Commercial Standard CS236-66.

      (2) Edge Bands: Hardwood, sides 1-1/2 minimum, top and bottom 1-1/4" minimum.

      (3) Crossbands: 1/16" thick hardwood at right angles to face veneers.

      (4) Adhesive: Type 1 for laminating crossbands and face to core.

      (5) Face veneer: Rotary natural birch. Premium grade.

      (6) Manufacturers:
         (a) No. DPC-1 by Weyerhaeuser Co.
         (b) No. 4324 by Morgan Co.

   B. Fire doors shall have 1-1/2 hour rating and bear the Underwriters' Laboratories label. Core shall be mineral type. Face veneer shall be rotary natural birch.

      (1) Manufacturers:
         (a) No. DFM-90 by Weyerhaeuser Co.
         (b) M-3465 by Morgan Co.

   C. Cut-outs for grilles and view panels shall be factory prepared. Wood trim of same species as doors shall be provided as stops.

3. EXECUTION:

   A. Doors shall be installed plumb in openings at locations indicated.

   B. Doors shall be hung with clearances of 1/8" at sides and top and bottom clearance of 3/8" without metal thresholds, 1/4" with metal thresholds.

   C. Faces and edges of doors shall be sealed upon delivery to job site. See Section 9F - Painting.

SECTION 8D

METAL WINDOWS

1. GENERAL:

A. Submittal: Furnish 5 copies of shop drawings indicating erection and anchoring details, material gauges, finish, and hardware including type hinge, roto operator and locking device.

B. Glazing: See Section 8E.

C. Storage: Units shall be stored so as to protect against distortion in frame and surface abrasions.

2. PRODUCTS:

A. Casement unit shall be aluminum, inside glazed type with natural anodized finish.

(1) Materials:

(a) Frame members shall be extruded of 6063-T-5 aluminum alloy and have a minimum thickness of 1/8" and a full depth of 2".

(b) Ventilator members shall be extruded of 6063-T-5 aluminum alloy and have a minimum thickness of 1/8" including webs and a full depth of 2". Ventilator members shall be tubular sections.

(c) Ventilator glazing legs shall be a minimum of .875 inches.

(2) Construction:

(a) Frame members shall be joined at corners by double mortise, tenon and riveted connection and shall be sealed using a non-hardening elastomeric compound standard with the manufacturer.

(b) Ventilator members shall be mitred, welded, and sealed with non-hardening elastomeric compound.

(c) Periphery of ventilator shall be weather stripped with lastomeric vinyl applied to integrally extruded dovetail grooves.

(d) Ventilator shall be equipped with a pair of heavy-duty extruded aluminum butt hinges. NOTE: Hinges shall be installed with tamperproof screws and hinge pin shall be made non-removeable.

(e) Locking hardware shall be cam-type white bronze with U.S. 25-D standard finish.

(f) Ventilator shall be operated with a roto operator. Finish U.S.-25D.

(g) Glazing beads shall be extruded snap-in type having no exposed screws.

(h) Sub-Frame: Provide at windows indicated.

B. Fixed sash unit shall be aluminum inside glazed type with natural anodized finish. Frame members shall be same as casement unit.

C. Manufacturers:
(a) Series 200 escape unit by Miami Window, Div. of Russell Aluminum Corp.
(b) Series 2750 sections by Lupton Manufacturing Co.
(c) Series 220 sections by Hope's Windows, Inc.
(d) Series 2100 side hinged escape by Aluminum Manfg. Co.
(e) Series 1100 casement escape by Winco
(f) Series 20000 escape by Wausau Metals Corp.
(g) Series 2250 escape by LWC Industries.
(h) Series C-A3 monumental by Kawneer.

3. EXECUTION:

A. Window units shall be installed plumb and without distortion in frame members.

B. Anchor window units in masonry openings in accordance with the manufacturer's instructions accompanying each unit. Secure each jamb with a minimum of 4 anchors.

C. Upon completion of work, window units shall be free of mortar smears and other foreign matter.

SECTION 8E

GLASS, GLAZING

1. GENERAL:

   A. Sample: Furnish 2 - 6" x 6" pieces of each type glass specified. Each piece shall be identified.

   B. Labels shall remain on all glass until after semi-final inspection.

   C. Cleaning: All glass shall be left clean and undamaged.

   D. Glass shapes shall be determined by field measurements of openings.

   E. Temperature: Glazing compound shall not be applied in temperatures below 40° F.

   F. Provide 10 year warranty on insulated glass.

2. PRODUCTS:

   A. Float glass (polished plate) shall be clear, glazing quality, one quarter inch thick.
      (1) Libbey-Owens Ford
      (2) Pittsburgh Plate Glass
      (3) American Saint-Gobain Corp.

   B. Clear insulating glass, 5/8" thick.
      (1) Thermopane by Libbey-Owens-Ford
      (2) Twindow by Pittsburgh Plate Glass
      (3) Tru-Therm by American Saint-Gobain Corp.

   C. Tempered, clear, insulating glass.
      (1) Thermopane by Libbey-Owens-Ford
      (2) Twindow by Pittsburgh Plate Glass
      (3) Tru-Therm by American Saint-Gobain Corp.

   D. Tempered, obscure, (burlap pattern), and clear, insulating glass.
      (1) Thermopane by Libbey-Owens-Ford
      (2) Twindow by Pittsburgh Plate Glass
      (3) Tru-Therm by American Saint-Gobain Corp.

   E. Acrylic sheet shall be 3/16" thick, clear.
      (1) Pexiglas by Rohm and Haas Co.
      (2) Acrylite by American Cyanimid
      (3) Safe-T-Vue by K-Lux

   F. Glazing compound:
      (1) No. 1231 by Dick Armstrong Pontius
      (2) No. M-251 by Pecora Chemical Corp.
      (3) Type DG by Gibson-Homans Co.

3. EXECUTION:

A. Surfaces to receive glass and glazing compound shall be dry and free from dust or rust.

B. Glass shall be set on neoprene setting blocks and in continuous bed of glazing compound on all sides.

C. Excess glazing compound shall be removed to provide an even surface.

D. Upon completion of installation, glass shall be free from cracks and rattles.

E. Float glass shall be installed in doors 12, 21, 22, 24, and 28.

F. Clear, insulating glass shall be installed in all casement window units.

G. Tempered, clear, insulating glass shall be installed in doors 2, 25 and 34 and fixed glass panel in space 105 and sidelights of doors 2 and 25 and doors 18 and 19 and view window in space 128.

H. Tempered, obscure and clear, insulating glass shall be installed in door 16. Inside glass sheet shall be obscure.

I. Acrylic sheet shall be installed in overhead doors in space 101.